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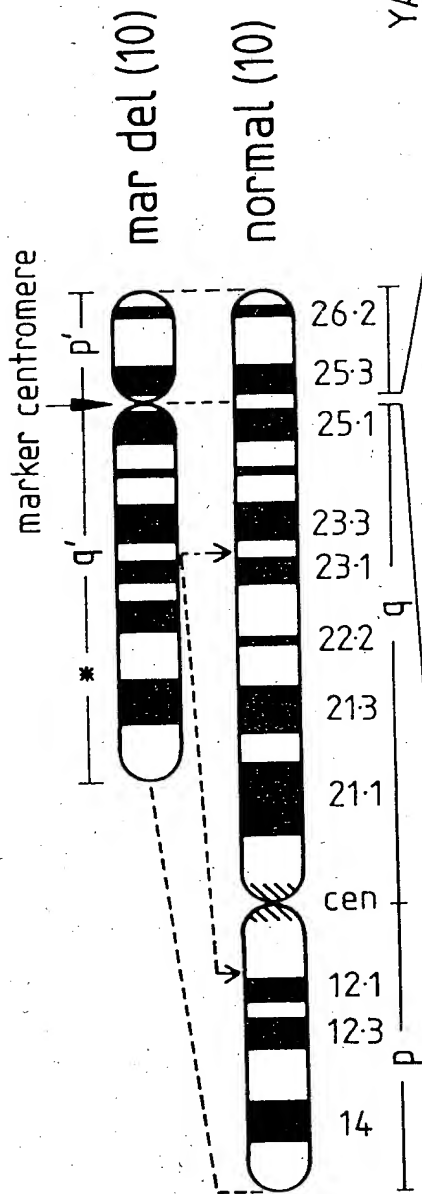


FIG. 1A

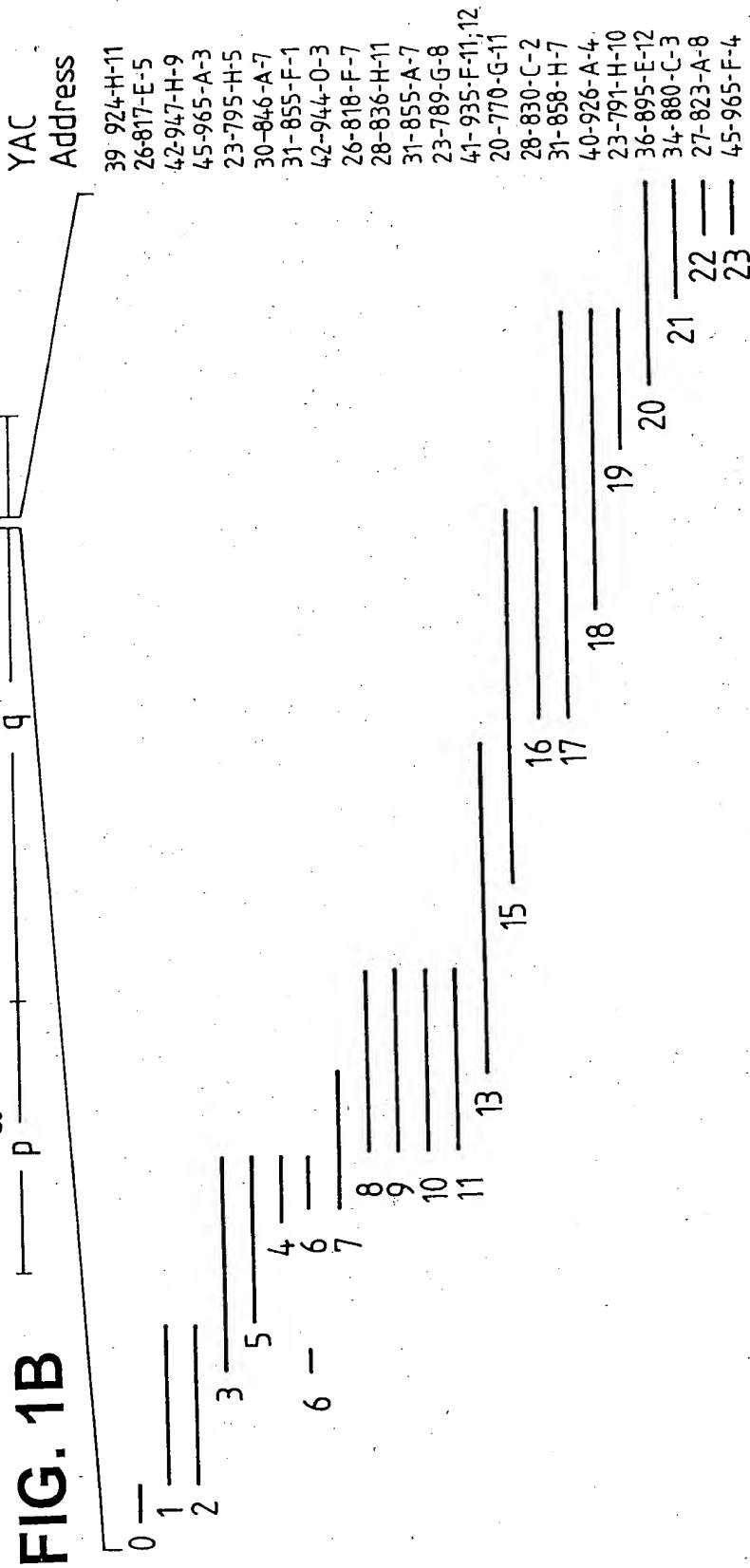
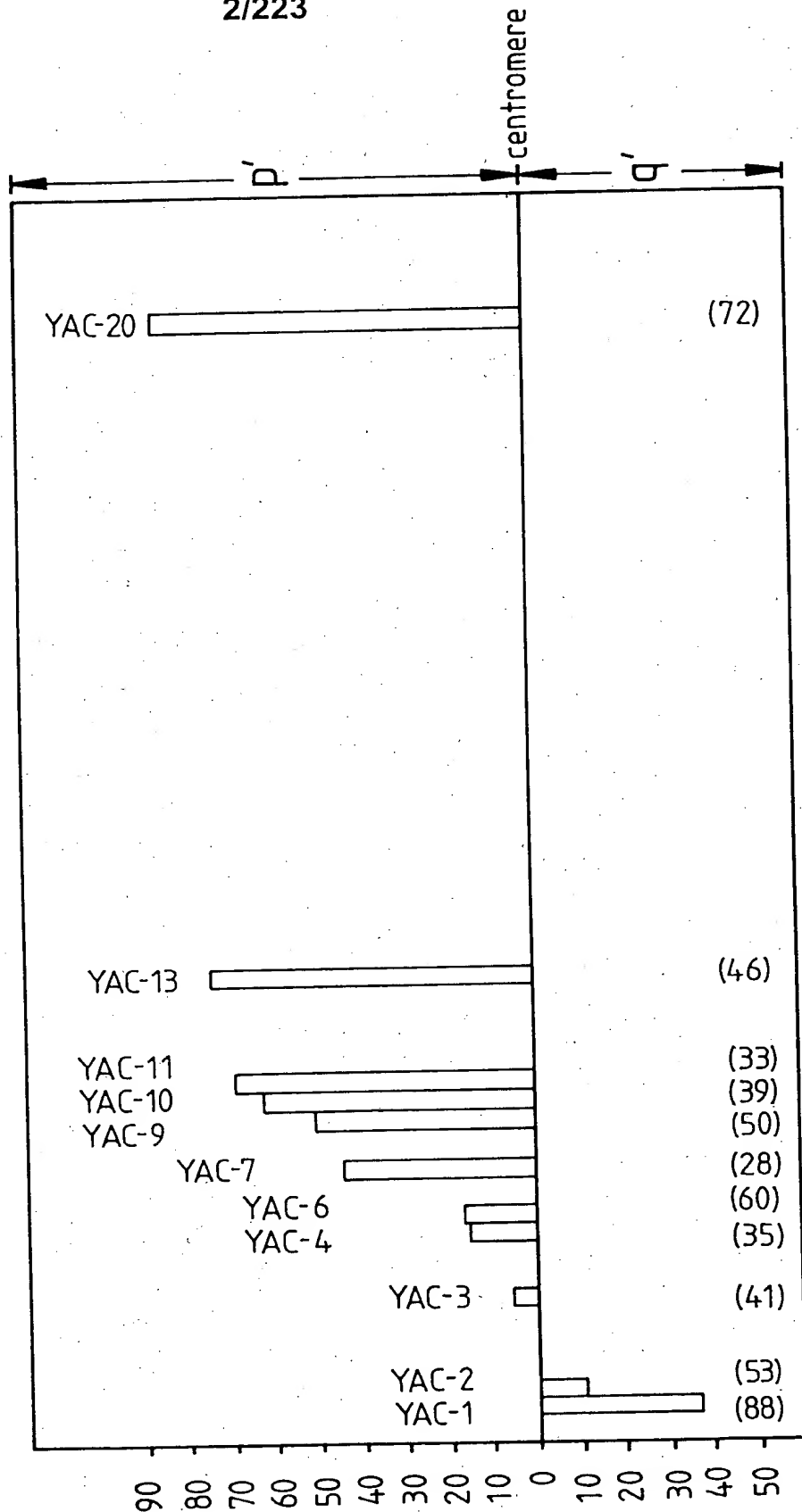


FIG. 1B

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FIG. 1C





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FIG. 2A(1)

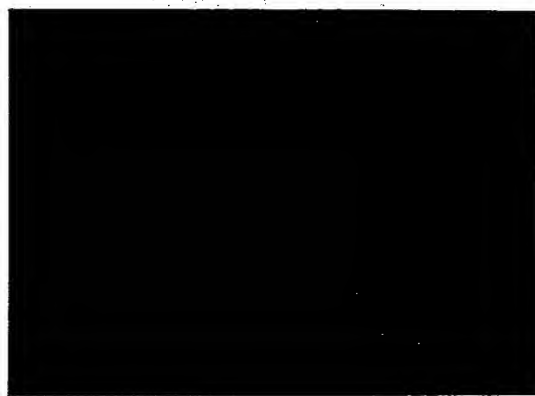


FIG. 2A(2)

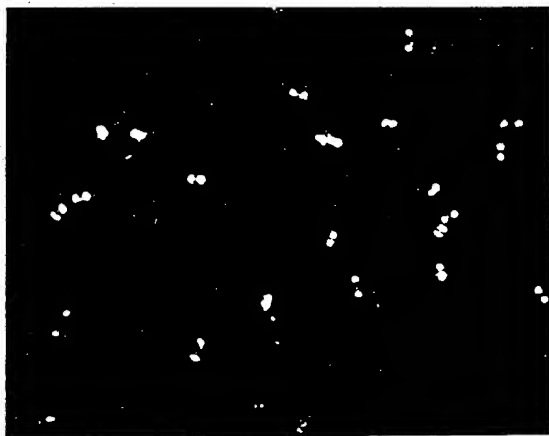
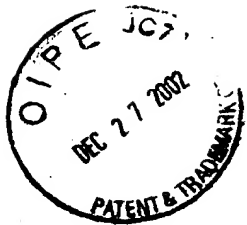


FIG. 2B(1)



FIG. 2B(2)



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FIG. 2C(a)



FIG. 2C(b)



FIG. 2C(c)



FIG. 2C(d)



FIG. 2C(e)



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FIG. 3A(e1)



FIG. 3A(e2)



FIG. 3A(f1)



FIG. 3A(f2)



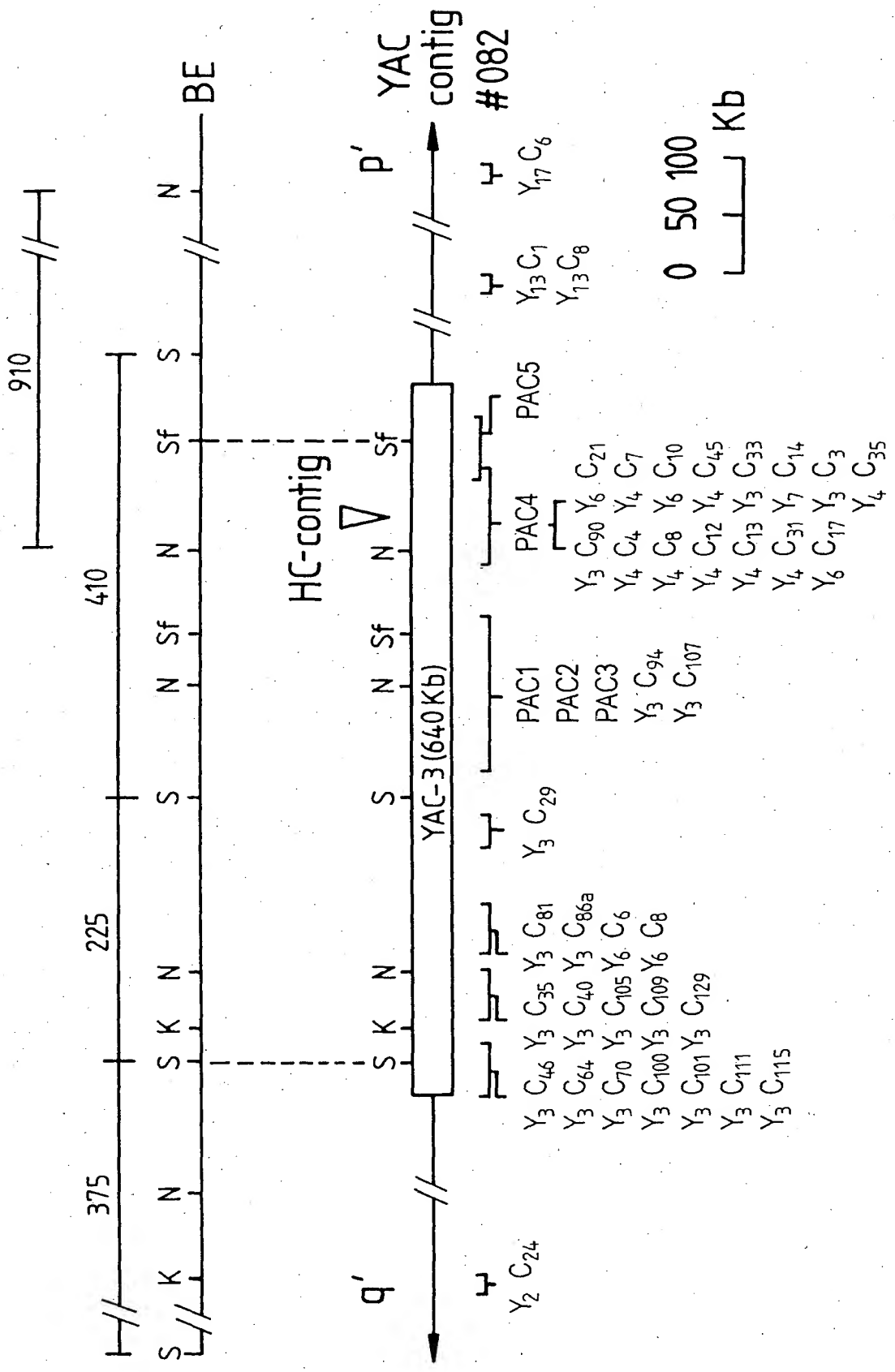
FIG. 3B(1)



FIG. 3B(2)

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FIG. 4A



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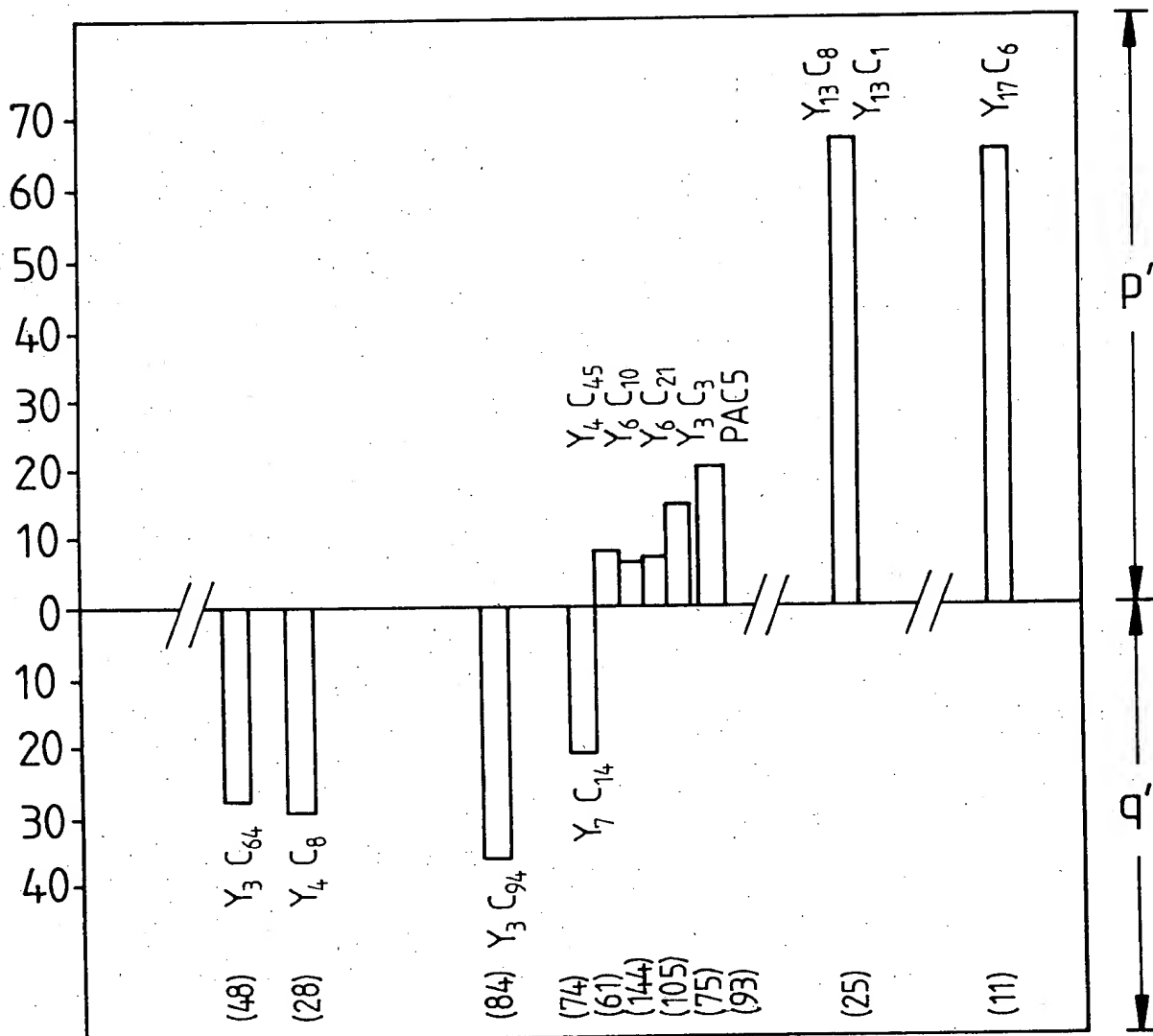


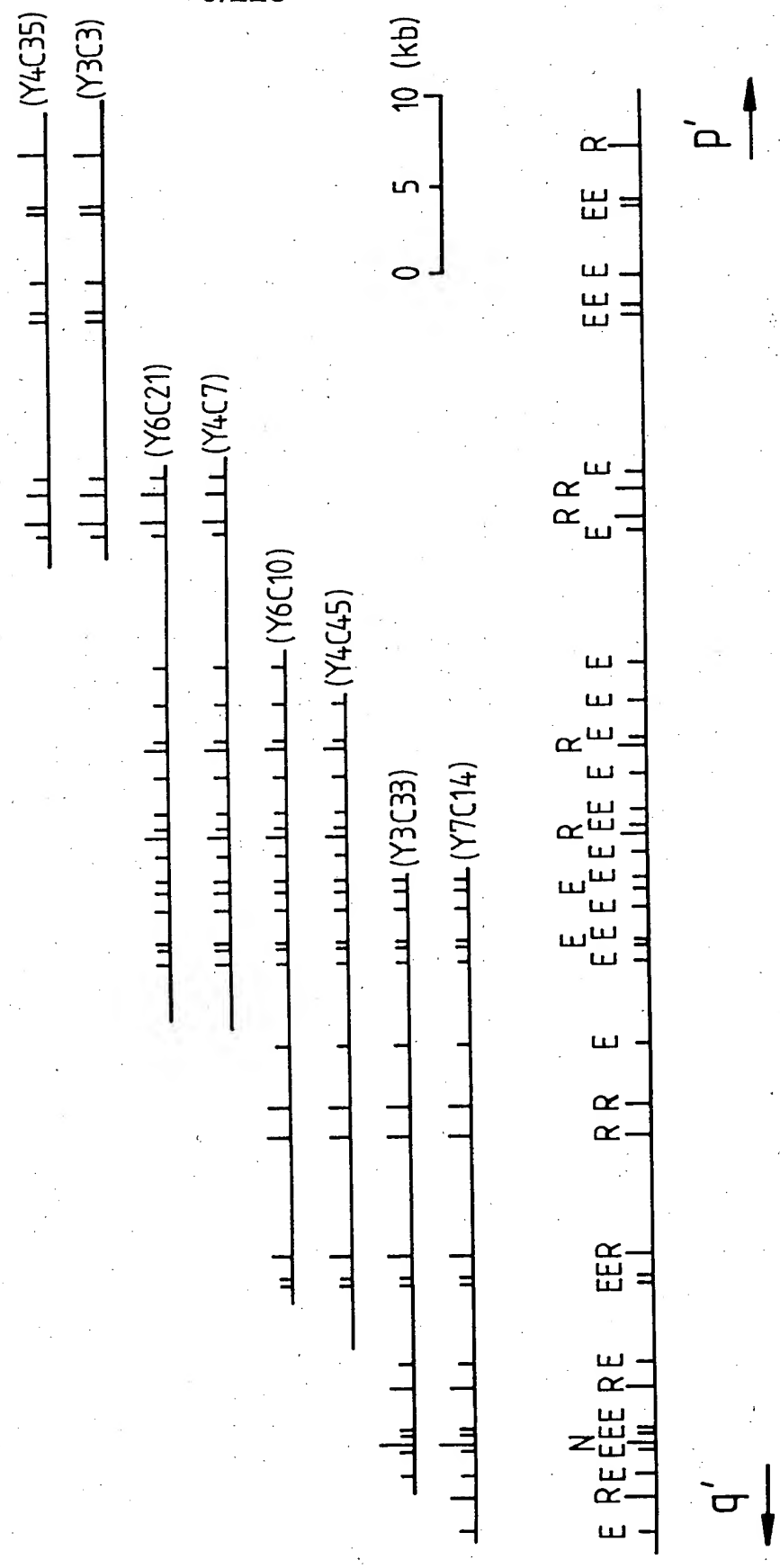
FIG. 4B



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FIG. 4C



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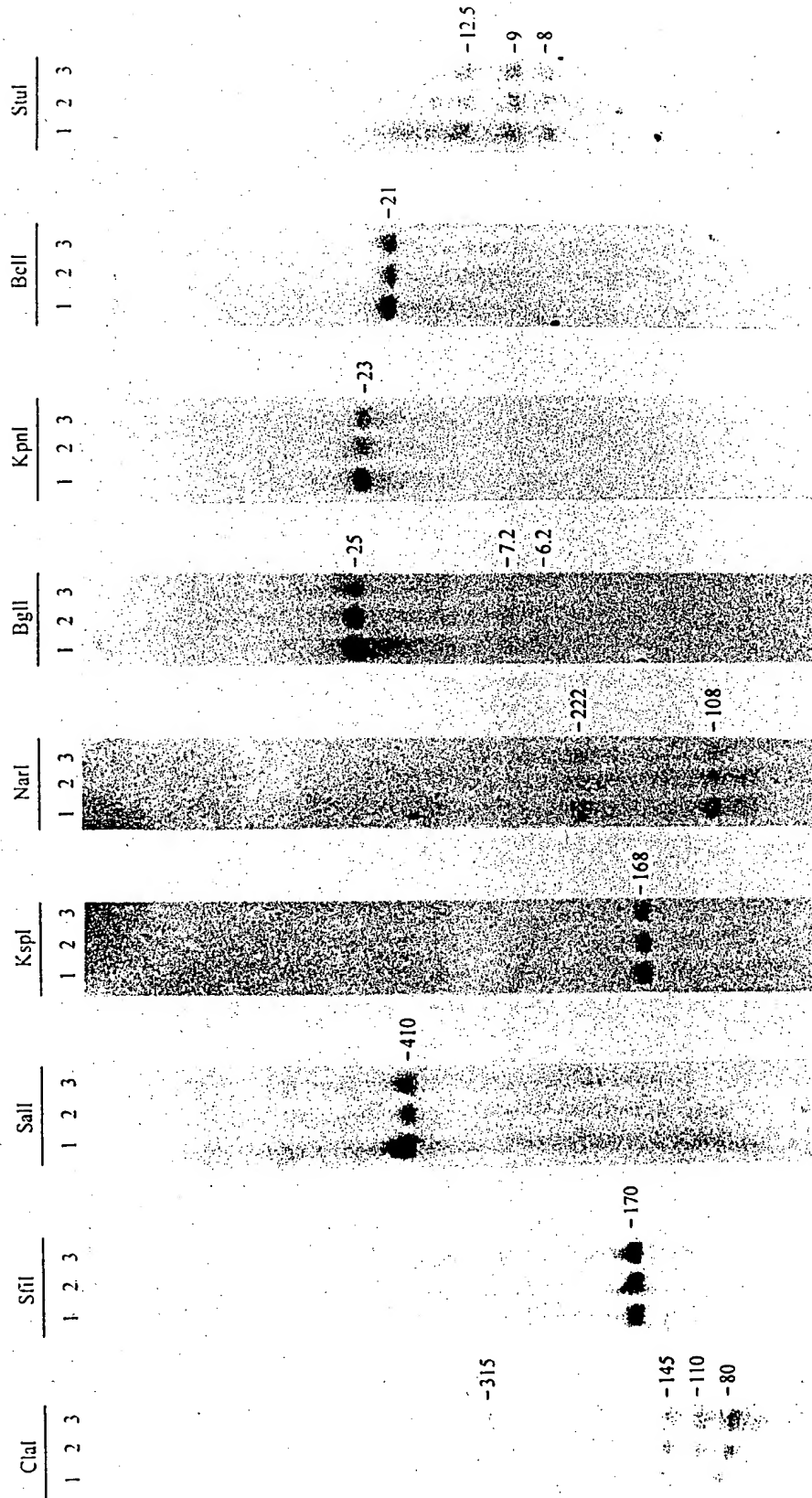


FIG. 5A



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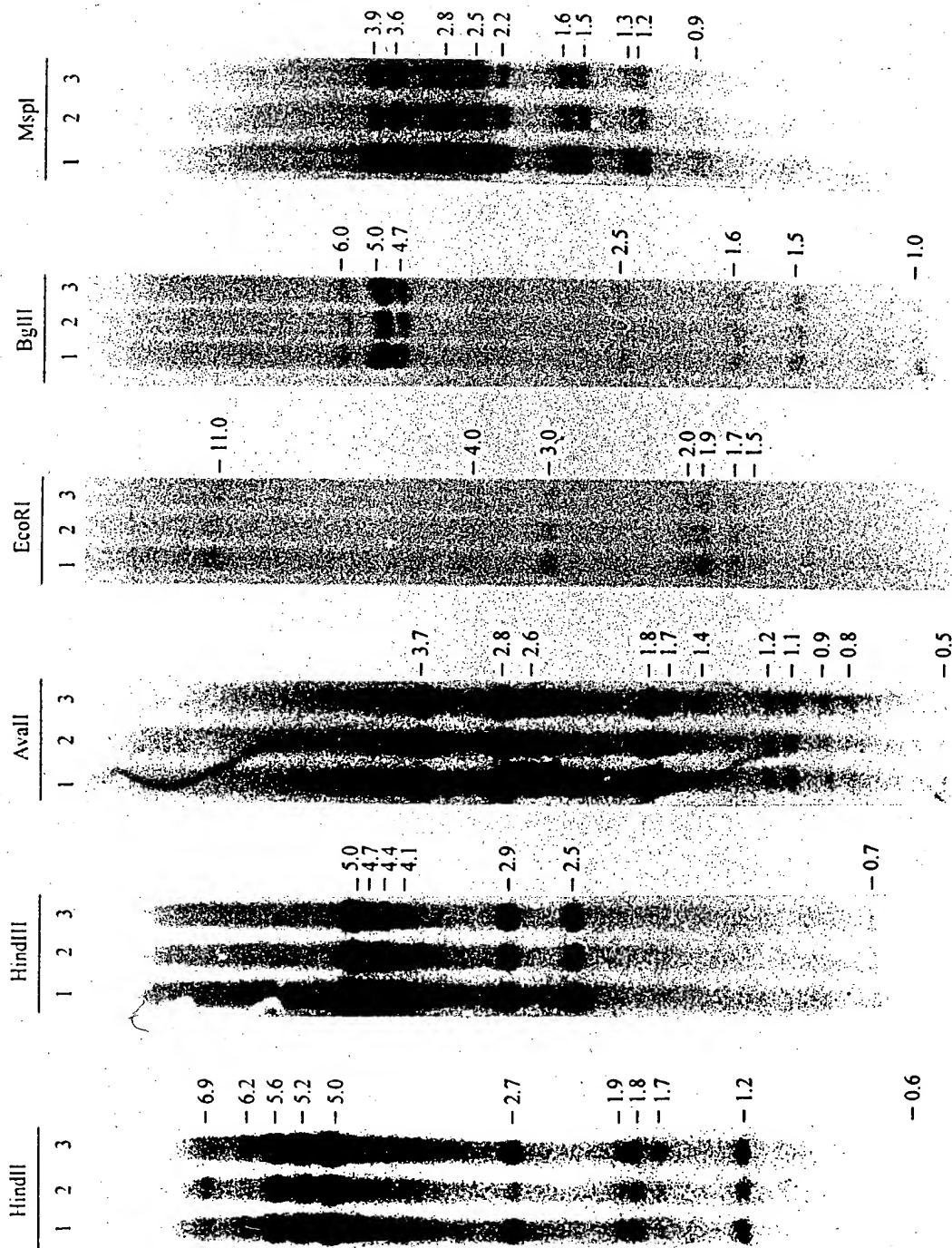


FIG. 5B

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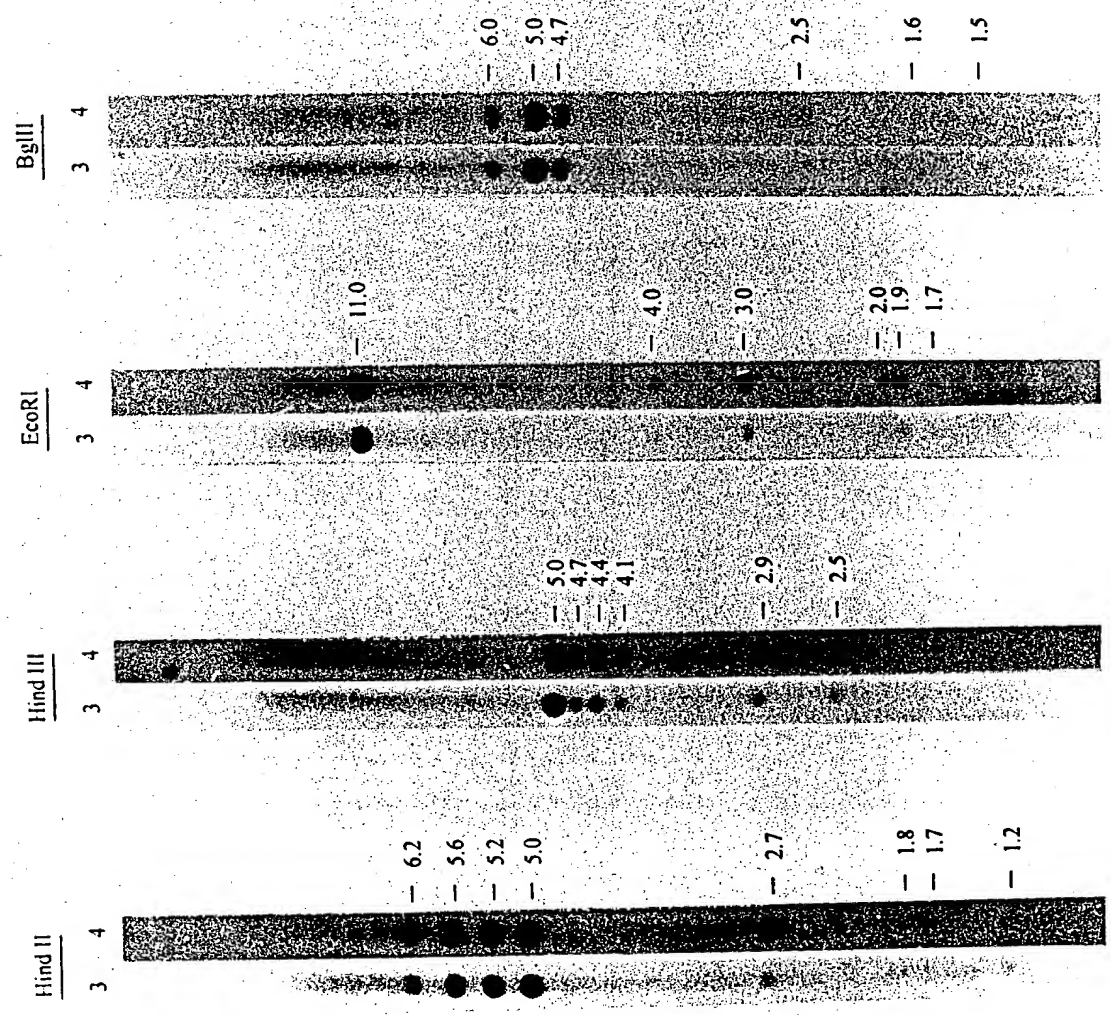


FIG. 5C



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GAATTCTCCT GCCTCAGCCT CCAAGTAGC TGAGGTACA GGTGCCAGCC ACCACGTCCA
GCTAATTTT GTATTTTAGT AGAGACGGG TTTACCCGTG TTTGCCAGGC TGGTATCAA
CTCCTGACCT CAAGTGATCT GCCTGCCTCA GCCTCCAAA ATGCTAGGAT TACAGGTGTG
AGTCACGCA CCCAGCCCTT CTTTCAGTTC TATCACCTCT TTTTGCTATA TTTGTATGAG
AGCTTTATTA TTAGGGGCAC ATACATTAA AATGTTATG TCTTATTGAT AGATTGATCT
GTCATTATGA ATGCTGTAT TCATTCCCTG ATAGTATTTC TTTTCTAAA TATTTTCTG
AATGTGCTG CTATTAAACAT AGCCACTCTG GCTTTTAAA ATTAGTATT TTATGGTATA
TATTTTCTCCT TTTTTTTTTT TTTAAGTTT AGATGTTATG TTTCTTATA CTAAAGTGG
GTGCTTATA GGCAGCATAT ATCTGGGTCT TGATGTATTA TTTAATCTGA TAATCTCAAC
CTTTTGTG GAGTGTTAG GCCATTACA TTAGTGTA TTATAGACAT GTTTGATTT
GCTATACCAT CTTTTCATTT GTTTTATATG TGAGCCATCT TTTTATGTT CTTTTTCAT

A _____ A

FIG. 6



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B _____ **B**
AAACAACAGT GAAGATTGCA ATATCAGTTG ACTCTTCCTT TCATGAAAGA TTTCTCTCTA
GTGTGTGATG CTTTTTGATA GCATTTTATG CACAGTAGAA CTTCTTTGAA AATTGGATCA
ATCCTCTCAA ACCCTGCTCT GCTTTAACAA CCTAAGTTAA TATAATATTC TGAATCCATT
GTTGTCATTT CAACAATTTT CACAGTGTCT TCACCAGGAG TAGATTCCAT CTCATTTCTT
GAGATGGAAT CTTTGCTCAT CCATAAGAAG AAATTCCTCA TCTGTTCAAG TTTTATCATG
AGATTGCAGC AATACAGTCA TGTCTTCAGG CCTCACTTCA CTTTAAATTC CAGTTCTCTT
GCTGTTTCTA CCACATCTGT GGTCTCTTCC TCCATTGAAG TCTTGAACCT CTCCAAGTCA
TCCATGAGGG TTGGAATCGA CTTCTTCCAA ATTCTGTGA ATATTATAT TTTGACCTCC
CATGAATCAT GAATGTTCTT AATGGCACCT GGAATGTTGA ATCCTTTCCA AAAGGTTTTC
AATTACTTA GTCCAGATCC ATCCATCCAG AGGATCCACT TTCAATGCCA GTTATAGCCT
TATGGAATGT ATTTCTTCAA TAATAAGGCT TGAAAGTTGA AATTACTCCT TGATCCATTT
_____ **C**

FIG. 6A(2)



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C _____ **C**

TCTGCAAAAT AGATGTTGTG TTAGCAGGCA TGAAAGCAAC ATTAATCTTT TTGTACATGT
CCATCAGAGC TCTTGGGTGA CCAGGTATAT TGCCAGTGAG CAGTAATACT TTGAAAGGAA
TTATTTTTCT TAGCAGTAGG TCTCAACAAT GGGCTTAAAA TATTGGTCC ACCATTCTGT
AAACTGATGT GCTGTCATCT AACTTTGTA GTTTCATTTA TAGAGCACAG GCAGAGTAGA
TGTAGCATAA TTCTTAAGG ACTTAGGATT TTCAGAAATGG TAAATGAACA TTGGCATCAA
TTTAAATCAC TAGCTGTATT AGCCCCCAAC AAGAGAGTCA GCCTATTTT TGAAGCTTTG
AAGCCAAGCG TCGACTTCTC CTCCCTGGTT ACAAAAGTCC TAAATGGCAT CTTCCTCCAA
TATAAGGCTG TTTTATCTAC ATTGAAAATC TGTGTGTTAG TGTAGCCACC TTCATCAATG
ATACTATCTA GATCTCTTGG ATAACCTGTG CAGCTTCTAC ATCAGCATTT GCTACTTCAC
CTTGTA CTCT TATGTAATGG AGTGGCATCT TTCCTCGTAC CTCATGAACC AACCTCTGCT
AGCTTCCAAC TTTTCTTCTG TAGTTTCCCTC GCCTCTCTCA GCCTTCATAG ACTTGAGGAT

_____ **D**

FIG. 6A(3)



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D
AGTTAGAGAC TTGCTTTTGA TTAGATTTTG GCTTCAGGAA ATGTTGTGGC TGGTTTGATC
TTCTATCCAG ACCACTAAAA CTTTATCCAT ATCAGCAATA AGGCTGTTTT GCTTTCCTAT
TATTGTGTG TTCACTGGAG TAGCACTTTT AATTGCTTC AAGATATATT TCTTGCATT
CACAACTGG CTGACTGGTG CAAGAGGCCT AGCTTTCAGA CTATCTTGGC TTTTGACATG
CCTTCCTCAC TAAGCTTAAT CATTCTAGC TTTTGATTAA AAATGAGAGA TGTAGGCCAG
GCACAGTGGC AGGCACAGTG GCATATGCCT GTAATTCCAA CACATTAAAGA GGCCAAGGTG
GGAGGATTGC TTGAACCCAG GAGGTGGAGG TTGTAGAGAT CACACCACTG CATTCGGTCC
TGGATGACAG AGCAAGACCT TTCTCAAAAT AAAATGAGAG GTGTGCTTCT TCTTTTGT
TGAGCCCCATA GAAGCCATAG TATGATTTTT AATTGGCCTA ATTTCAATAC TGTGTGTCT
CAGAGAATAG GGAGTCTGA AGAGAGGGAG AGAGGTGGG GAATGGCTGG TCAGTGGAGC
AGTCAGAACA CACATAACAC TAATAATTG TTTGCTGTCT TATATGGATG TGGTTGTGA
E

FIG. 6A(4)



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E _____ **F**

TGCCCCCAA CAATTACAAT AGTTACAGCA AATATCACTG ATCACAGATC ACCATAACAG

ATATAAGAAT CATGGCAAAG TTTGAAATAT TCTTGAGAAT TAGCAAAGTG TGACACACAG

AAACAAAGTG AGCACATGCC GTTGGAAAAA ATTGGTGTG ATAGACTTGC TCCATCGCAA

GTTTGCCATA CGCCTTCAAT TTATAAAAAA CACAATATCT AGGAAGTTCA ATAAAGTGAA

GTGCAATAAG ATGAAGTATG CCTGTAAATA TTTCAGGCTT TCCAGACCAT AGGGTTTCTG

TTGCAACTGC TCACCTCTGC CATTATAGCA TGAAGCAGC TATAGAAAAT ATACATAAAT

GAGGCCTGTA ATCCCAACAC TTTGGGAGCC CAAGGTGGAT GGATCACTTG AGGTCAGGAA

TTTCGAGACCA GCTTGGCCAA CATGGCAAAA CCCCGTCTCT ACTAAAAATA CAAAAATGAG

CCAGGACTAC GCATGCCTGT AGTCCCAGCT ACTTGGGAGG CTGAGGCAGG AGAATCTCTT

GAACCCGGGA AGGGAGGTT ACAGTGAGCC AAGATTGTGC CACTGCACTC CAGCCTGGGC

AACAGAGTGA GACTGTCTCA CAAAAAAA AAAAGGAAAA GAAAATACAC ATAAATGAAT

F _____

FIG. 6A(5)



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F

GTATGTGGCT GTGTACCAGT ATATCCTCAT GCTCTAGCTT GCCAACCCCTT GCTTTACACT
GTCAGTTACC TTCTAAAGAG ATTAAAAATC ATAACAATAT CTATTACGTT TATTCACATC
CTAGTGTCAT TTCTTCCTTA TGTAAGATCA AATTTCATTC TGGTATCATA TTTCTTCTTT
CTAAATAAAT TCCTTTAATA TTTTATTATG CACAGGTCTA ATAGCAATGC ATTATGCAAT
TCATTGCTAT TAGACCTGTG CTATAAATA GCAATGAATT ATGTCAGTTT TTATTTGTCT
GAAAAAGTTT TTGTTTTTTG AAATATACTT TTGCTGGGTA TATAAATCCA TGTTCATAAA
CTTCTCTTTT CTCAGCACT TTAATGAAGT CACTCAGTTA TCTTCTGGCT TGTATAGTTT
CTCTGGCTGC CTTCAAGATT TTTTCATTGT CTTTAATTTT TAGCAGTTTG ATGTGCTAG
GAGTGATTTT CTTTGTAATT ATCCTTTTGG GGGCCTCTTA ATTCTTTGA TCCTTTTTTT
CTTTTTTTTT TTTTTTTAAT CAGTTTGGT CTGTCTCCTC AAGTGGGCTG AAAAAAAG
AAAAATAAAA TCATAGTTTA AAAAATAAAT TTTGGAAAT TTTACAGCTAT CATTTCTTCA

G

FIG. 6A(6)



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G
AATATTATC CTA CTCTATG CTCCCCTCCT CCCCTTTCCT TCTGTGACTC AAATTACAGG
TATATTAAAC CATTTTATTT GTTCACGGCA CTGGATGCT CTGCTTTCCT ATTTTGTGTC
TTTCATTTTG GATAATTCT ACTGACCTAT CTTCAAGTTC ACTGATTCCT TTCTCAGTCA
TATCTAGTGT GCTCAACGCC TGTGAAGAA ATCCCTTGTG TTTAATATCA TGTTTTTTAT
TTCTAGCATT TTCATGTAAC TCTTTGTTCT GGTTCCTCCTC TCTCTACTCA CTTTTTTTTT
TTTTTTTTTT TTTTTTTTGAG ACAGAGTCTC GCTCTGTGAC CCAGGCTGGA GTGTAGTGCC
GCGATCTCGG CTCAC TGCAA CTTCCGTCCTC CTGGGTTCAA GTGATTCCTC TGCCATCATCC
TCCCCGAGTAG TTGGAATTAC AGGTGCCCCAC CACCGTGGCT GGCTAATTTT TGTATTTTTT
TAGTGGAAAC AGGGTTTCAC CATGTTGGCC AGGCTGGTCT TGAATTCCCTG ACCTCAGGTG
ATCCACCTGC CTCAGCCTCC CCAATTGCTG AAATTACTGG CATGAGGCAC TGCACCCAGC
TCTGCTGACA TTTTTTATCT TTTGCTGTCAT TTTGCTCTACC TTTTCCCATGA AATCCCTTAA
H

FIG. 6A(7)



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H _____ H
CATAGTAGTC ATAGTACTT TCAATTCCCTT GTCTGACAGT TCTGACATTC AAGCTAGGT
CTGTTAATAG CTTTGTGAGT CTGTTAACAG CTTTTTTTCA TTCTTGTCCTG TGTGTTTTGT
ATTTCTTGAT TGTATGCCAA ATATTGCCCTG TAAATAAAC TTAGATAAGT CATACTTCTA
TCCAGAAATA GGCACATTTT TTGTGTCCAG TCATTAGTGT GGAGGGAGGT TGGGGCAGTC
TAGTCAGTGG CTGAACTAGG TTGGGATTG TTGATGCTAT ACTAGAATG CACCAGACTT
CCATTCACTG CAAGAGTGGG CTGCTGCGCT TTGTGATTCA TGTGAGGCCT GAATTGTGGG
TTTTTCCCTA GTGTGTCCCT CCATGCTCAG ATTTCAGCAA GTCTTCATAT CTGTGCCACA
GAAGGAATCT GACCCATGCT CTTTTTGACC TCCCCAAGTG ATCAACTGTT GCTTGTATA
GCTTGTGATG GAGTAAGAGG GTGTTTTTTT AGTTTTTCATC CTCCAGCCTT GGTCTTGGGC
CCTGAGCTCC TAGACTCCAG GAGTGGATGG AATCCAGTGA TTTCTCAGTA ATTCAGCCCC
TTCTCCAGTA GTGGCAGATC TCTGCTTTGT ATCAGTGCAA GATCCCTGGC TGAGCTCATT
| _____ |

FIG. 6A(8)

TTCTGCCCTT CCTCGAGTGG CAGACAGCTC TTGCTTTTCAC CCTTCTACCA AAGGCAGTGC
ATCTTTTCTT GGGCCTCTCC CCATTGAACT TATGACTTTC ACATAAGAGA AGGGCTCATG
TATCAGAGAA TTCTGTGACT TTGTGCCACA TACAGAGTCT CTCAGTTCTC TTGCCCTGCC
CCAGTCTTTT TTGTGAGCAC CTAGTAGAGA CCTTGAGAGA AGAGCAAGGA AGCGAGTATG
GACTTCTTTT GTGTCTGTGG ATTGCTTTGT TTCTCAACTG CTACTCTTGG ACTTTAAGAA
TTCATTAAAA TTTCAGCTGT TTTCTTTTAT TCTTTTGT TTTCTTTTTT TTTTTTTTTT
TTTTTAGATG GAGTCTTGCT CTGTGCCCA GGCTGGAGTG CAGTGGTGTG ATCTTGGCTT
GCTGCAACCT CCGCCTCCCG GGTTCAAGCG ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG
GGATTACAGG TGCCACCAC CACACCTGGC TAATTTTGT ATTTTAGTA GACACAGGGT
TTCACCATTT TGGTCAGGCT TGTCTCAAAC TCCTGACCTC ATGATCTGCC CGCCTCAGCC
TCCCAAAGTG CTGGGATTAC AGGCATGAGC CACCGGCCA GGCCTCAGCT GTTCTCTTTT

FIG. 6A(9)

FIG. 6A(10)



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K

GTTTGGAGGT TATTTCTCT ACTTACTTT GCTGGAAATG GAACACTCTG TATCTAGTTA
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG AATTTTATAT TCTTAGAAAA
TCATCTGTCA AGTGTTAAC TAATGGCAAA GCATTTAATA AATCAGCATT CATGTATTCA
GGTGCTCTGA ATTATCTGAC TTTTAAATTC TTACTTTATA AATGAGAAAA TTGGGGCATG
GAAAAGTTAA CTCCTCCTAAC CCCGAATTAT TACATTATTA AGGACAGGAC TTAGAGGCCA
GATATCTTAA GTCATTAAATA TTCTTTGGCT CACAGAATTG GCAGTATAAC CTAAAGGTAA
TAACTAGGTG ATTTTCTTTT ATATCAATTA AATATGTCAG TTTTCAAATA TTCATAAGTA
CCTACTGTGC AGGAAAGAA CATGCCATAC AAAAGATGTA GTCCAGGCCT TTAAGAAACT
TTCATTTAAT GGAACCTCAA GAAGTGTA TATAAGGAGG GAAGTAGCAG TATGGTACAA
GATAATACAT ACATATCAGT GAATGATATT GCCAAAAAGT GCTATTGATA GAGAAATAAT
TCATTTCTGC AAACAGCTGC TGATCTCCTA CTGAAAAACAG AGGAGGGAGA ACAGGACGCC

L

FIG. 6A(11)

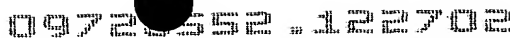


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L
TCGTGTCAG GATAGAAGAG AAAGACCTTG AGTTGAGCCT TGAACAGTAT TTAATATTCATTA
AAAGGTTAAG AGAGGAGAGC AATTGAGGAG GGGAGAATAG TTCCAGCACACA AATGATGGTG
TACAAGATGA ACACAGTCAG TAAAGAGCAG ACTGGTCTGG ATGGAGAGGA GGATTTGCAAT
CATTTGGGAT TACGTCATTT AGACCCCTTGA AAGCCAGGAT TGAGTAAAGC CACAGTGAAG
CGACTGGCTC GTATGGAAGC TTTATTTTAA GAAGATTAAAT CTGGTAGTGA CATGTGCCAA
AAACTGAATA GGAGAAAATG AGATGCAGAG AGCCCAGTTA GAACTAAGTC TGGTGCAGTA
ATGCAGGATT GAGGCAATAA ACACCAAAT ACAGTATCAC CAGATAATGG ATGTTTGAAC
GGACGGTTA AAGGAAAATT GATGGTATTT GGTAATTTAT TAGATAATCC AGGGCCATGG
AATGAGAGGG GAAAATGACT AACCATAGTC ATCAAATGGT TTTTCTTAAAT GAATCTGAAT
TTTGGTGTA GAGCAACATT TTCTTAGGCC TTGCCCTAGTT GGTACAGCTG ACTATGATAA
TGACTGCTAC CATGCTTGTT CCTCTTTTAG CAGCTGTGAG TCCCCCACCACCA GCCAAACAAT
M

FIG. 6A(12)



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CTCTGTTGCC TAGGCTGGAG TGCAGTGGTG CAATCGTGGC TCACTGCAGT CTCAACATCC
TGGGCTCAAG CGATCCTCTC GCTCAGCCTC CTGAGTAGCT GAGGTGTGCA CCACCACACC
CGGCTAATTT TTAAATTTTT TTATTGTAAA GTGAGGTTTT CACCATGTTG CCCAGGTCTC
AAACTCCTGA GCTCAAGCAA TCTGCTCACT TCAGCCTCCA AAAATGCTGG GATTACAGGC
GTGAGCCACC ACGCCTGGCC AGTAAACCCC ATTCACTTAC ATCATCTTAC TTGTCCCTCC
AAAATCCTGC AAAGTAGGTA GGTCTGTCT TTAATTTGTTA TTTAGGTGAA GAACTTGAAG
TGGTGTGAG GAATAGGTGT TTTGCCAAGA GTCACGCAGC TGGAGTGGCA GAGCTGTATA
CTCTTCTGAT TCCACCAACG CTGTTTACAT CACATCTGGA GAAAAGTGCT CTGAGGCACA
GATGTTTAGT GGGAGGGATG AGACACAGGC TGCAATGCCT AAAGATAATC GGAATAAAA
GCAGAAAACA AGACGTTTGT TTCTGTATAA ATGAGACAGA AAATAAGCGG TTTGTTGTTT
GGGATTGAGC ACTTGGAGAA GTGGGAGCG ATTTGATTG GTGAGACTG CTCCTGGAAT

FIG. 6A(14)



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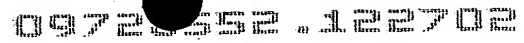
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P

GTGGCTCATG CCTATAATCC CAGCATTTAG GAGGCCAAGT TGGGAGGATC ACTTAATTAA
GCCCAGGAGT TCAAGGCTGC AGTGAGCTGT GATTGCGCCA CTGCACTCCA GCCTGGGTGG
CAGAGTGAAG CCCTGTCTCT AAAAAAAAAA AATAAGTTAA AAAGAAAGAA AAGGATAGAT
GAAGTATGCG AAGATGTTGG TAATGTTGAA CCTGAAGGAA GTTAATATGT GAGTTCACCT
TCCTCTTCAG TCTTCTTTAT GTATGTTTGC CAACTTTCAT AATAACAAT TTAAATTATA
TTTTTCCTGAT CAAACTTAG TAGCAGTATT AATCCCCTGGG CTTCCCTGACT AGAACAGCCT
CATTACCACA TGGGCAGAGT TCTGGCCGAC CAGGACCAC GTAGTGGTTC ACCATCTTGC
TCTGGTAATG TGGTCTGGGC TGAAGGGCCC TTCTAAGGT TGTAAGATAGA AATCCAGGAA
ACTTGTTAGA ACTGCAGACC TATCAGGGTA CCTGCAGGAG GTGAGTCTAC TAAGTGAA
AAGCAGAGGG CAGAGGTCGT GATTAGCAGC TGACCGCCCC CTGCTTTTCT GTCCCTCATT
CGTGGAAAAT TGAGTGGAGC TCAATTTTGA GTGGAGCTCT AAGTAGCTCC ACTTGTAGAC

Q

FIG. 6A(16)



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ATTGAGTGGA	GCTCTAAGTG	TCTTCAGAAT	AGCAAAACAC	TAGTTTTCCT	TTTCTTTTCT
TTTTTTTTTT	TTTTGGAGAC	AGAGTCTTGG	TCTGTCGCCC	AGGCTGGAGT	GCAATGGCAC
GATCTCCGCT	CACTGAACTC	TGCCTCCCCG	GTTCAAGCGA	CTCTCCTGCC	TCAGCCTCCC
GAGTAGCTGG	GATTACAGGT	GCCCACCACC	ACGCCCAGCT	AATTTTCCTA	TTTTTAGTAG
AGATGAGGTT	TCACCCGTGTT	GGCCAGGCTG	GTCTCAAAC	CCTGGCCTCA	AGTGATCCGC
CTGCCTTGGC	CTCCCAAAGT	CCTGGGATTA	CAGGTGTGAG	CCACCACACC	CAGCTGCAAA
ACCCATATTT	TCTTGAAATGG	AGAAACACTT	TCCCCCTTATT	TATTGAGTTT	GGGAAGCAAG
AAGAGGGGTA	ATTCAATTAAG	TGAAAATTTC	CAAAATCCAG	AAAACATCGA	TAAAGCAGCA
GCTTAATTTT	TTTAAGGAAG	AATTTTAA	ACTATCTTCT	TTTGAGCCTC	TTTAGGAAGA
CCTCACGTCC	TTGCCTTGAA	TGTTGAGAGT	GGGAAATCCA	GGGAGTTTG	GAATGCATGC
CTTATGCTG	CTTTTTTGTT	TGTTAGAGAA	ATATAAATAT	TTTATCTAGG	TTTTGCTGAT

FIG. 6A(17)



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R
GGCAGTCAAG CATGAACACA ACCCACTGTT TGAGAAAGCTG TAAATTCTGA ATTTCTGCAG
AGTGACATC TAGGCCAGCA AATGGCAGTA AGAGTGAGGT GGATTAGCT CAGTGTAAGG
ATGAACTCCA GAACCATCGG CTCTGACTGA AAGTGAAGCG GCAGCCGCGT TGTGGGAAAG
CTGGCTGGAG TCTCTCTCAT AAGCAGGCAT TCTTTTCTC CAGCCCGTCA CTGTGTTGGT
TTGGGCCCAC GGTAAGCCTC CTGGCCTCTA GGCTGTAACC CCCACCATCC TCCTCTGCCT
CGCCTCCAGA GTGATTGTC TGAAGCACAA CTGGATGTCA TTCCCCTTCC TGAACCTCCTA
GCACCTACAG GGACTCCATC CCTTG TGCCC CACATACCTC ACACGTAGAC ATTCCTAATG
AAGATTGAT TGAATTATTG TAAACTCAGT GCCTCCCACCT CTTCTAGTTG CCTCTCTGCC
TGCCTTTGTA CATTATTTA TTTATTTATT TATTATTTA TTTATGAGAC AGAGTCTTAC
TGTATCACCC AGGCTGGAGT TTAGTGGCAC CATCTCAGCT CACTGCAACT TACCTCCCAG
ATCAAGCAAT CCTCCCACCT CAGCCTCCCC AGGAGCTGGG ACCATAGGCA CGTGCCATAT
S

FIG. 6A(18)



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S
GCCCCGTAA TTTATTGTAA TTTTGTAGA GATGGGTTT CATCGTGTG CCCAGGCTAG
TCTTAACTC CTGGACTCAG GCGATTGCGC CGTCTCAGTC TCCCCAAGTG CTGGGATTAT
AGCGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG
GCTTTCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTC
CCAGTTGTG GCACATTCTA GGCACCTCGC ATCATGAAAT AAACCTCTGG AGCTGTGATA
TTACAAACGT GGAAGATGA CGAGCACTCA GCAACTTCA GTGAGTAAAC AAAGGCTTTC
ATTCAGCATG ATTTATTGAC TGCCCCAAATC TGGGCTGCTT CCTGCTCTGTG GTTCAAGGAG
AGCATAGTCT ACAGAACCCAG AGACCTGGCT ACTCTGGAAG TTAGACTTAA GCCACCCCG
GTCCCTGAAT GGGGAAATAT TTCCCTTCAT TCCTGTGTTT TAGGGACAGA AAGATGAGTA
ATGCAGTGAT ACATGCTGGA AATGTTTATT CCACTACCCG AAGCTGCCCTC TCAACTTAAC
AATCCATGAA AGAAACAAGA TGGTATATAA CTTTCTCTAA TTTGTGATGC CTTTGTATT
T

FIG. 6A(19)



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T
TTGTTCCGG TTAAAAGAGG AGTGGCATT GAATTGTTG TTTGGTTTGG TTTCTTCTTC
AATAAGAAGC ATCTTAATAT AACTAGACTG GACATCTGTC CCATTTTCAA AAATTACAAG
TTTCGATCAT TGCTAAATTG TACAGATCCC AATCTGTCTG CTCTGCATAC ATTTGCATT
ATAAAAGCAG AAGCAGACTA GCAGTCTTTC TAATGCAATC CCCCAAATGC ATGAAGTATT
AGATTGCTTC TCCCTATTGG TTCATGCAAT GCTAAAGGCT TAAAAGGATC ATTGATTTTA
ATTATTTAAT GTGTACAGCA GGCTGAGCTT CCTTCTTTT TTAAGGGAAG AACCTTCAGG
GGCATTGCTT TAGTTTTTTA ATGTTAAATC TCATTTTCT TTGAAAATAA GAAGTTAAAG
CTGTATTCAC ACAAGCTCTC AAAGTGCCAG ATTTTCATTG TGTTTTAA CCATCTAGGA
AATGTTTGAT TCTAATGAAA CATTACTGCT GAAAATTGGG CTGAAATTGC TGGGCTGGAA
ATATTGTTAT AACTTCACAT GATCCAGTG TTGTATTATT ATTTTTCCT TTTCTTTTTT
TGACCCGATA TAGATGAAGC GAAGAGACAA GGAGCAATCC CATGTGTAAT AGAAAAAGGC
U

FIG. 6A(20)



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U

AGCCTGAATT GTTGTGCTG TTTTGTGAAAT TTAAGCTGGT TTTCGATTAA ATTCAGTAAA
TGGTCCAGGA CTATAAATGT TGAACATTTT TTACCGTGTG ATTTAAATTT TAGTCTTATT
GTTTTTTTTT TTTTGTGATGG TTTACATTTT CCCCATGGGA AGCAGCTATG TCATGTCGGC
ATGATTTCATC ATGGTAACAT CTCGGGTAT TTTGGTTTGT GTTATGTTC GAAAGCGGAA
TGCCAAAAAT AAAGAGTGGT TTGTGATGTC TAGTGTGTCT TCCTTTAACA AATCAAAGGC
TTTTATTAA TCCACTTAAT GGGACACTGC AGAAATTAA AAAATGGAAG TCCCATCCAC
AGAAGGCAGG TACTATGATG TAAAAAGTTT AGGTGGGGA TTAATAGAGT GATCATATAA
TTTATGAGCT AAACCGGAGG CACTTTTTTT TTTGAGATCG AGTCTCACTG TTGCCCTAGGC
TGGAGTGCAG TGACGTGATC ACAGCTCACT GCAACCTCCG CCTCCCGGGT TCAAGCGATT
CTCATGCCTC AGCCTCCTGA GTAGCTGGGA CTATAGGCG CCACCACCAT GCCAGCTAA
TTTTTGTGTT TTTGTAGAG ATGGGTTTC ACCATGTTGG CCAGGCTTGT CTCAAACTCC

V

FIG. 6A(21)

V
TGACCTCAGG TGATCCGCC ACCTCGACCT CCTAAACTGC TGGGATTACA GCGGTAAGCC
ACCATGCCTG GCCCAGAGAC ACTTTTGAGA GTGAAGAGGA AGCTGAGAAT AATTCACCTGA
TCTACAACCTG GGACCATCCA GGGCAAGCCA GATGCCATTA CCACTAGCTA GAAAGCTTGC
CAAGGTCTCA TTTACCTTGG TATATAGCAA ATTCTTCTTT TGAATTCTGG AAATTCCTGGT
AAGTCATTGA GGTAGCTCTG TGCCAAGGAG CAATATGGTA GAATTCCTAAT ATTTCAGGCA
GACAACACTT TCCTGCATTT GTAGCAGGTA AAGGAGGTC AGGGCAGAAG ACAAACCAC
TGGGACTCGA CAAAGGGCAT AAACGTCTAA TGCACCTGAT GTAGCTGATG GTAAATTGTT
ATCAGCTAAA GATCTTTCAT AATAAATAAA CTTATCATTT GTAGGAGGGC ACAGAAATCG
TGGAAGCTG GGATTCAGGT TGCCCTGTGGC TTAAATTCTG GAATCAGAAA TATTAGTCAA
GGATATCAGT CTATGAAGTA AGTTTTCAT GTTATATGCC ACAAGATGCA GCTGTCCTAT
TTTCACTTCC AGTAATTCCCT TCTGAATTAA TACACCTTAA AAATAGCTGC AGCTTCTCAA
W

FIG. 6A(22)



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W

ATCTGTGAGA ATCGTATGTG CTGCTTGCTA CACTTTCTTT TTCTCTGAAGG CTCTTTGAGG
TCTTTCAAGA ACTCAATTCA ATTCAGCAAC AATTAGGGG TCTAAGGTAT ACAGACGCTG
TGCAAGATGC TCCTGAGACA CAAAGAGGAG GTC AAGCCCC TGCCTTCAGG CACCTCTCTA
TAATATAGGA GGAGAAAGAG AAGAAACACT AATACACATA GGTAGGTGCC ATTAAAGGG
TACATACATT AAAGCCAGGT GGTAGGTGTA AGAAGATTG TAACATGAGA ATTTCTGCA
TGTTTGAAAT ATCTTATAAT TTTTAAAAAT TAAAATGGGA GATACATATA TATGTATTTA
TGTATGTATA TATGTATGTA CATATACACA CATATATACA TAAATATATA CATAAATATG
TATATATGTG TATATAGACA TAAATATGTA TATATGTGTA TATATACATA AATATGTATA
TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA GACATAAATA TGTATATATG
TGTATATAGA CATAAATATG TATATATGTG TATATAGACA TAAATATGTA TATATGTGTA
TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA

X

FIG. 6A(23)



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X

GACATAAATA TGTATATATG TGTATATAGA CATAAATATG TATATATGTG TATATAGACA
TAAATATGTA TATATGTGTA TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA
TATGTATATA TGTGTATATA GACATAAATA TGTATATATG TGTATATAGA CATAAATATG
TATATATGTT GTATATAGAC ATAAATATGT ATATATGTGT GTATATAATA ATGTGTGTCA
TATACACACA TATATACATA CATAAACATT CTGCATTATA CCATTCACCT TGTAACCCAT
CTTCCCTAAA AACTGTCTCA TAAAGAGTCT TCTTTTCCCT GTACCTATGC AATGGTAAAGT
AGCAAAACAC ACATTCTTTT GGGTCCCCAT AACATTCCCT GTAGTTTGCC CTTAACAGTC
TTTGATGTGA AATTACTGT TTCTGTCTTA ACCTTGCCCTG TCTCGCGTAC ATGGAGTTT
GGCTCCTGGC TCCTAGTCTG CATCTTCACC CCATCCCCTG CCCAAGAAT CTGGTTATGT
GACCACTGCT CATCTTTTCT GCTGCCACAA CTCCAGTCCA AGCCACAAC CTCTCTCTCC
TGGA CTCTG CGGGAGTTC CTTTCTCTCC CTGCATGAGT CTATTCTCCG CACA ACTGGC

Y

FIG. 6A(24)



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Y
ATAGGTAAGT GAGACTGCGG AAGAGGCAAG TTGCAAGTC CAGAGGAAAT GAAGACTCTG
CTTGTGACA TGCTGGGTTT GACGGGTGCT GGATATCCGA TGGATGGCCC TTAAGGTGAG
CTCAAGGCTT AAGGGAGAGA TAGGGGCTGA TGATCTGAGA TTCATCAGTG TGTGGCTGAT
GTTTAAACCC AGGGACACAGG ATAAGAAGGT TATTCCAGGG AGAGCGTAGA TAAAGAAGCT
AAATGGCTTC TGGGTCCTTA GTCATTCAA ATCGGACCTC TGAGGCAGGA GGAAAGCCCA
GAAAGAGTAG ATTCCCTGGA CTCACGGGAT AAAGACTTTC AAAAAGTGGG GGCTGGCCAG
TGCTGCTGAA GGAAGTAGCA GGACCCGGAAC AGAAGGGTAA TCGTTGGACC TGGAGAACTT
GAATTGAAT TTAAAGGTTG GTAACCTTAA AAAAGAGCAA TTTTAGATAC CTTTGAAT
TATTTGCAAG ATTTGTTTGG TATATGTGTT ATTCCAGGCA AAGGACCAG AAAAGTAAAA
AATACTTACT GAACAGTTAC TGCATGCCCTG GCACTGTAAC ACCCTGTTTA ATTCTCACGG
CAACCCCTATA GAGTAGGTGT CATCATCCCC ATCTTACAGA TGAGGATATG AGGTGCAGCT
Z

FIG. 6A(25)

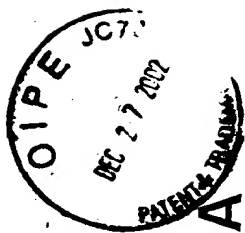


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Z _____ **Z**
AGATTAAGCA GTTGCCTCA GGTACACCA ACTGGTTAAC GTAGAGCTAG GATTGAACC
CGGATGGGCT GATCCAGAG CTATGCTTT AAATCGCTAG ACTGGTGCTC ACAGAAGACT
GGGACCGAAA AAAATTAATA AAAAAATAA GGAGCCCCCT GGGCTAGCAA ATTAGAGATT
GTTCAGACAG ATGTGAAAAG GAAAGCAAGG CAGAGGGAAA GTCACGTGTAC AGAAGAGAGA
GACCCATGAC AGCAGAGACA GTGAGCTGGT AAAGTGGCTG GCGATCTAGC CCTGAAAAT
ACCTCCAGAG AGGAGGCTC ACGCCTGTAA TCCAGCACT TTGGGAGGCC GAGGTGGGCA
GATCACCTGA GGTGAGGAGT TTGAGACCAG CCTGGCCAAT GGCGAAATCC CGTCTCTACT
AAAAATACAA AAATTAGCCG AGCATGGTGA CAGGCACCTG TAATCCCAGC TGTTCAAGTTG
GCTGAGTCAG GAGAAATAGCC TGGATCCGGG AAGTGGAGGT TGTAAGTACG CAAGATTGCC
CCACTGCATG CCAGCCTGGG CGACAGAGCA AGACTTTTCT TAAAAACAAAC AAACAAAAAA
GAAAAAAGAA AAGGAAAGAA GAAAGAGACA AAGAAAGAAA GAGAGAAGGA AAGAAAGGAA
A' _____ **A'**

FIG. 6A(26)



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A'

GGAAGGAAGA GAAGGAAGGA AGGAAAGAAA GAAAGGAAA GAAAGAAAA GAAAGAAGAA
AGAAAGGAAA GAAAGAAAG AAAAGAAAG AAAGAAAATA CCTCCAGAGA GCCAGGTCTC
TTAGGCCCTC TGAGAAACTC ACATCCCCTTT TGATGAACAC AAATGCTTCA CACTCTCAAT
GTTATTGGTA ATCCAAGTTA TCAATATACC TAAATCACTT AGTACTGAAT CTGGCATATA
GTAATCACCT AATGAAGAGA TAAGAGTCAT GGAGTATTCT GAAGCAATTA GAATCAATAG
ACTCAATATA CACATGGCAA CAAAGTTGGA TCTTAAAAAC CGACCTGAGT GAAAAAGGAA
AGGGAAGAT ACATAACACG GTACCATTTAT GTAAATTGAT AATATATGCT TACACAATT
GTAAGAACAC ATACAAATAG ATACATGTAT ATTAAATATA CTCGAACGGT TACCTATGGG
GTGGTGGCTG GAGTGGGGGT AAGTCCGTAA GCTGTAATGG AACCTAAACA AATACATGAA
ACGAGTAGGA ATCAGAAGGA GTAACAATAA AAATGTGCCA TGAAGTGAGG AGTGTAAT
AATCAACTCA CTGCATCTGA GGTAAAAAT AGAAAGATGA TAATTGTTAT TCTTATTACT

B'

B'

FIG. 6A(27)



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B'

CGTAGGTCTT CCACTTGCAC TCAGCTTTAC AATGTTGGAC TATCCTTCAG ATGGCACCCCT
CCTTGCACTT GCTCAGGCAG GAGAGCTTTT TCCTCCAGCT TTCTAGGTGA TTTAATATAT
CAGGGAATAA GTATAAAAAA AGGCACGGTG CTCCTTGGGT AGCCTTTCTG GACTTCAGAG
CTAAATTGCA AAGTCAGTTT TACACATGTG ATTTCACTCTA TGAAATTAGG GCAAGGTAGA
AAACTGGCAC AGAAAAAATG TGATTATTATTA TGGTGTACT ATCCCTTACA AGCGGAGTGT
CAGCTGCCCTC TTTTGTCCA CTGATTTAAG GCAAGATGAA CTGAAAGTGG CTATGATCAC
GTCTTCAAAA GCACACTCTG GCCCCTCGGC TGCAGGCGCC CTGCACATTC CCCAGCTGCG
TGTCGGGTGG TGACACAGTG CATAATTGTG GCGCCTTCCT GGTGCAAACT GTCTCACTTA
GCTCCGTCCTT GCTGGCACAG CAGAAAGGAA GAAATCGAAA ATGTTTGAT TTCAAAGGTA
ACAAGAAGCT GGAAACAAC TACTGGCCGA GTCTGAGAGT TTCAGCGGAG ACTGGTGCAG
CCTTGTGTTT TTCCACTGAC AGCTGAAAAAT GAGCCCAGCT TCAGTGAAGC TTGTTTCCCTT

C'

FIG. 6A(28)



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C' _____ C'

CCCTCCTCAA GGTACCCAC AATTCTCAGT TCTCTCAGGA AAGCCAAAA ATGAATTGTA
GGGTTAGGA TTGTGGTTCT TTTATCTATT ACAGGATTGA TAATATGTTC CTCCACCAGA
TGTTCTGCTT GTAACAATAC TCACTTCCTG ACACTACTGC ATATGCAGGA GTGTACTAC
CAAGGTAAAC ACAGAAATTG CTGCCCAATT CCAAAATCCCT GAACTGAGTG AGAGAAATCA
GAATTATAAT AGGGGATTCA ACAGAGCTGG CTACGGATGT GCCAGTGGTC AGATACTTG
CTCATCATAC GCAGGTGCTG CTGCTCTAGC AACTGCTCAC TGCTTCATTT CCTGCCTTGG
TCTTTAAATA CTGCTTTTCT CAGCTCAATT GGCTTTCTTC CCTCTGGCAG TCACGTTTCT
TTGGGTCAAA CAGCAAATGA TTCTTTAGAA TCACCTGGTA CTCAAAGGAG CTACAAGACA
TTGGGCATCC ACTTCCACTC TCTTGGAAAA ACAATTTTAT GGAAGCCAAG GTTGCCATAG
TGCCCTCTTGA GGTGTGTTGC TCAGCCAAGG CCCAAGCTTT GTGCTTCAAA CATGAAATTA
GAGAGCTTCA GAACAAGATC CACATTTTCA ATGGCCTCAC CCAACTGGAT AAAAGAACAA

D' _____ D'

FIG. 6A(29)



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D'

TTGCCATATC TCAATGACCA CCTTTTTCAG GTGGGATGGT AGATGCTGGA ATGGGTCACA
GCATTGCCCA ACCAAACTTT GCAAAAAAGG CTGGAAGCTC TGA CTGGGGA CCTAAATAT
GCAAAAGTTG ATAGGCTCTT CATGCAGAAT ATGAACCCCG TGTATGGATA TAGCTAAAGG
GTGGCCCTT ATGTTTCTAT TCCTTCACAA ACCTGGTAGA ATAGATATGC TTGTTCCCT
TTAAAAAATG TCAACAATTG CATTATGAT GCTGTGTATA GTAAC TCACA GATCATGCTC
CATGAAAATG CTTCAGAAC CAATATAAGG AGATTTTTA GCCATGTGTG ACAAAGAGA
GGCCATTCA GTGTGAAAT TGTCAGAGA AGTATTGAT TATGTTTCT CAGATCTTT
TATTTTATT TTTTGTGAA CAGAGTCTCA CTTGTGCACC CAGCTGGAG TACAGTGGCT
GTGGTCTCGG CTCACTGCAA CCTCTGCCTC CCAGGTCAA GCGATCTCC TGTAGCTTC
CCGAATAGCT GGGATTACAG GGCATGCAC CACCATGCCT AATTTTGTA TTTTAGTAG
AGACAGAGTT TCGCCATGTT GACCAGGCTT GCCTTGAAC CTGACTTCA GGTGATCCAC

E'

E'

FIG. 6A(30)

E'

CCACCTCAGC CTCCCAAAGC ACTGGGATTA CAGGCATGAG CCACCGTGCC CAGCCTGTTT
TCTCAGATCC TGTATTGTT TCTGAAGCCT TCATTCTAT CTCTTATTC ATTTTGAAG
TAGTACACCT AGTAAGGTT TTTAACAATC AAATATCTTT GGAAAATTCC CTGGTTCCCT
TCTTATTCCT ACAAAAATAT GTTCAGTATA GCTGATGTTA TGTTTCTTTC AAATTATCA
TTTCTCTATC TCAGAAATTA TCTCATGCCT AATTGTTATT GAATAGTCTT CACTTCTTGT
CATCCAGTTT CTGGTCTCTT ATTTCACCTT AAGCTAAGT GGCTATTAGA ATAAAGAGCT
TGTAACAGAT TCTTCTCCA ATATGCTTA TCTTTGACT GCATGCCAGT GACAAACTGT
TAACTGTTTT GATTCTTCAT AACATTCCAC AGAACATGCT GACTCCTCTC TTCCCTGAAAG
CAATGCCCAA GCACAGCATT GTTAGATAGT ATGTACGCAA CAGGGACATG GGTGCATAGC
AAAAACTAGA AGGAAGGAGG ACCTTCCTTA GCAATGGTG ATATGTGCC TGGACTTAGA
CTCCAAAGG TCGTGAGGTG AAACACACAT CGTCCATACC CAGGAAGCAC ACAGGTGGGA

F'

FIG. 6A(31)

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F'

TGGAAGAGCT GTGCCTAATG AACTTCATC CACGTGGAGG TGGAGGAGGC TGCAGCTGCA
AGAACTCAGA GCTGCCCTTAC CCAGACCAGG GACCAGGGAG GGCTTTCTGG AGGAAACAGC
CTCTGAACTG CCAGCTGATA GAGGAGCTCT ACCTCAACTC TTCTGGTTCC CCAGGGCTGC
TTTTCCACGT CCATTTATG GCACTGAAGT TTGAATACCT TCAGGGGCC TCAGGCCTGC
CAGGTCCTCT TCTCTGCAGA GCAATCACAC CAACCTGCAA AGGCTAGGA AAGGGCTGTC
ATCATCTCCT ACTCAGAAAC TGGTTCACTG GAAGGACTCA GGGGCCACTG AATACATCCT
GGCAGCTTTC ACAAGAAGG CTTCTGACTC AAGGATGTTT CCATCTTTGC CAGGTCGCCT
TTTCTCCTTC TCTTAGAGTT TGGAGGACGC AAATGTGCTG AGAAGTCAAC CTTTCCCTGCA
AGGTGAGACA CAAGGCCTT TCCCAGCAGA AAGAAGAGAG CAAATGGAAG GTCCCTTCTTC
CTCCAGTAGA GGATGGACTC TGTCTGGCAG CCACCCAACA GGAAAGCAC AATGCATGCC
TGCCCTGCTTC CCTCCCTCCC TCCGTTTCTC CCTCCCTCCC TCCTTCCCTCC CTTCATCTCT

G'

FIG. 6A(32)

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G' _____ H'
CTTCCCTTCC CTTCCCTTCC CTTCCCTTCC CTTCCCTTCC CTTCCCTTCC CTTCCCTTCC
TCCCTCTCCT TCCCTTCCCT TCCCTTCCCT TCCCTTCCCT TCCCTTCCCT TCCCTTCCCT
TTTCCCTTCC TCCCTTCCCT CTTCCCTTCT TCCCTTCCCT TCCCTTCCCT TCCCTTCCCT
CCCTTCCCTC CTTCCCTTCC TCCCTTCTTC CTTCCCTTCC CTTCCCTTCC CTTCCCTTCC
TTGGAGTCCA TTCTGATTAT GCTGTAATGT CTGCCCCCTC CTCTTCTCTG TCAAAAATG
AAAGACATGG AAGCCACTTG CCTTTTACTG AATTAAAAAT TAGTAAAAGA GCTAAAAATT
AATGGTTAAA AATGTACGCA TAAATTATGC AGTATACTAA CCAATGAAAA GATACACTTC
TCTTAATTAA AAGCTGACAG GGAGGAAAC AAGAAAAGAG AAACACAAAA CAATAATCTA
AATGACCTAT TAGTTGGAAG AACACATCA GAGAAAATAG ATACTGTGTA TAGTCATGTG
TATGTCATG GAATAACATT TGTAGAGAAA TCTGGACTGA TCCTTTTCTGA GTAAAGAGAG
CTGTGGGTAC AATTAAGGGG AGATTGAAAG GAATCCAAAA GCATAGCAGA TGCTGTGCCT
H' _____

FIG. 6A(33)

H' _____ H'
CACTGGAATG GTGCCGATC TCCTCCAAAC TATGAAGTGT TTGAGGCTCA ACTTTAATAT
AATTAAGATA CAAAGACAGA ATGAGAGAAA GAGAGAAGGG AGCTCACTGG AAGAACAACCTC
AAGATTCCTT ACTACTCATT CTCTAAAATT ACAATTGTTC TAGATGGAAA AGAAAAAAG
CTTCTCTGTT AAAAAAGGAG CTTGTGCTAT AGGAGGTTTA AAATATACTT CTGACCCATC
TCCAACATTC TAAATCCTTC CCAGAAAAGT ATGCCAATCC CAAGAAATAT TCAATCAAAT
TGCTGGAAAG AAAAATACAA AATATTAAAA TGTATTAGGA AGCGACAGTA ATTAATCAG
AACTGGAGCA GGAATAGACC AGCAGATCAA TGAGACAGAC ATCAAGTCCC GGAATGTGGA
CTTGCAAATG CATTAAAGTAA TATGATATGC AATAAAGGTG GCACAGTGAA CCAATGGGAA
AAAAATTAAT CTTATAATAA TTGATATTGC AATAATTGTC TAGTAATTGG GGGAAGAAAT
AAGCTTATTC CTTATCTCAT TTCTTTTTTT CTTTTTGAGA CAGAGTCTCA CTCTGGTAGC
CCAGGCTGGA GTGCAGCGAT GCGATCTCTG CCCACTGCAA CCTTGCTCTC CCGGGCTCAG
I' _____ I'

FIG. 6A(34)



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I' _____ J'
GCGATTCTCC CACCTCAGCC TCCCGAGCAG CTGAACTACA GCGGTGTGCC ACCACTCCCG
GCAATTTTTT TTTCCATTTT TAGTAAAAAT GGGGTTTCAC CATGTTGCCT GGGCTGGTCT
TGAACTCCTG GGCTCAGGCA ATCCACCCGC CTTGGCCTCC CAAAGTGCTA GCATTACAGG
CATGAGCCAC CGCGCCTGGC AGCTCATTTT TTAGACTAAA TAAATTGGAG ATGGCTAAAA
GATTCTATG TAGGCCAACT ATGTTTTTAA AAAGTTTTTT TTTTAAGGAT ATCTGCTGGA
ACCAATCATG CCACCAACCA AAGATGCAAG ACTATAAAC ATACCCAGTT TTTCAAAGCA
TTTAAAAATT ATTCTAAAAA TATTTTTTCT CCAGAAATTT TGCATTGATT CCTGAAGAA
GCATTAATAT GGGACCTGAC TTATAAAATG ATGAACTCAA TCTCCCCACT CAAGGTAGGA
GTCTCTCAGA TTTAAAAAAT AAGCATCCTA GTCCTCTTGT CCTGTAAA GTTAACCTT
ACACCTGAAA CACCAGGAGA CTGGCGGTG TTTGCATAGG GGTACAATT AAAGTTGAGC
TACCTCTGAC ATCTATTAAC ACCAAAAATTA GTAAACTATG CATGTATGGA GACTTTTATG
J'

FIG. 6A(35)



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J' _____ J'

ATTGAACTTG TTTATTGAGT CAAGAGATAT AGTTTACAAT GAAAAATTGG GGCATATCAA

AATGACCCTTG GCTTAGCTTA GCATTGCTG ATGTTAACTA TTTTCTTCAT TGGGCTGATT

TTAGTTGCTT AGGAAAAATA CAAACACACA CACTTTAAA TTATATTAAA ATCCCGTCCT

AAACCTCAGA GTCCAGAACC GCATCCTAAC ACTGGTCATG CATAATATGT TTAAATTTT

GTGCTTTAAA AACTACAAAT AAGGAATGTA TTAATAGTTC CACAATCAAT GGTCAAGTTAG

CCGAGGGAAG ATTAGCATAG TTAAAGACTT AAAATGGCTT TACAACATAT ATCAAAAGGA

CAAAATAAGG GGAACAGAGT CTAGAAATGA GGAACCTGG ACACAGGCAA AAAAAAAAAA

TGAGAACTGG GACATGAATA ACGCAAGGGA TAAGACTAAT ACACAAAACA CCCCAAATAA

ATAGCCAGCA TTTGCTGAGC TCTTACTGTG AGCCTGTTCT AAGCACTTA CATATATTAA

CTCATTTCAT CCTCAAGGAA CCATCTGAGG CAGGCACTGT TATCATCTCC ATTTTACAGA

TAAGGAATAG ACCCAGAGAG GCTGAGCAAC TGGGCCCTATT CCACAGCTAC TATGGTGGAG

K' _____ K'

FIG. 6A(36)



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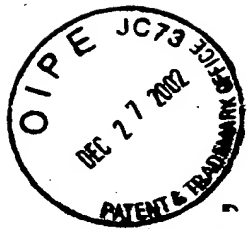
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K' _____ K'

ATGAGATTTA AATCTAATCA TTGGCTCCAG AGCCCATGCA CCCAATGGCT GCACTAAGTG
AATGCATGCG CTATCAACGT TGCCAAAAGT GGGCCACAGC TCGGATCTGC GTTTTCCAGT
AGCCAAAGCA GAGAGTGTGA TCAGACCTCA CTTAATAAG CAAGTCTCAA GCCAGAGAGA
GGTGGTATCA GGCAGCAAAC AGGCTGCTAG TCGAAATCCC ACTTCTTCTC TGAGTGGTCC
ATACAGTTTT ACTCTACTTG CTTACAGAAAT GAAAATAGCT GGAGTTCAGG TGCGCTTTCA
ATGCCCTGTT GTCAGGATTG GGCTTTTCAA GTTTATTTT TGTGTGTT TTTAATAGAC
TGTACTTTTT AGAAAATTTT TAGATTTACA GAAAGATTGA GAGGATAGTA CAGAGAGTTC
CCGTATACCT CACACCCAGT TTCTGCAATT ATTAACCTCT TACATTCA TGCGTACATTT
GTTACAATTA ATGAGCCAGG GCCGGCCGG CACAGTGGT CAGGCCCCTA ATCCCAGCAC
TTTGGGAGGC AGAGGCAAGC GAATCACTTG AGGTCAGGAG TTCGAGACTA GCCTGACCAA
CATGGTAAAC CCTTCTGTGA CTAAAATAC AAAAATAG CCAGGCATGG TGCTGGTTGC

L' _____ L'

FIG. 6A(37)



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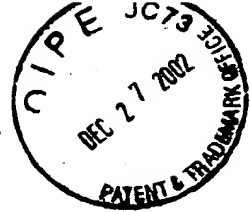
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L' _____ L'

CTGTATTCCC AGATACTCAG GAGGCTGAGG CACAAGAATT GCTTGAACCA GGGAGGCGGA
GGTTGCAGTA AGCCGAGATC GTGCCACTGC ACTCCAGCCT GGGCAACAGA GCGAGACTCC
ATCAAAAAAA AAAAAAAAAA AAAAAGAAGG AAGGAAGGAA GGAAATTA TGAGCCAATA
TTGAGACATT ATTATTACTA AAGTCCATGC TTTATGCAGA TTTTCTTAGT TTTTACCTGC
TGTCATTTTT CAGTCCAGG AATGCATTCA GGATGCCATA CCACATTAG TTCTCATATC
TGCTTAGGCT CCTCTTGGCT AGACTGAGTT TTAATCTACT TTCTGCAGAG CCTGAGAACT
TTAGCATAAT TTCCTTGGAA ATTACAGCTC AATATTTTCA AGCACTTATA CAAACAGCCT
AATGTTACGT TGGCCCATAA CAGTGTTTCA AGTAATAAA CTTCTTTGTT TTCTGTGCCG
ATTGAAAGAA CTGCTGCTTA GCCTCCTGCC AGATGATGAA CTGGGTACAC ACGAGCATTT
TTCCAGGTAA AGCATATTTC GTGCGACTTC TTAAGCTGCA GCCTTATATG CAATAATTGT
CCATTACAA GACTTATGTT CGAATTTCAG GCACTCTGTT TTCACTAACC ATATCCTTCA

M' _____ M'

FIG. 6A(38)



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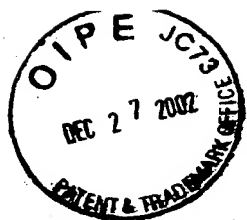
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M'

ACTTTGATAA GTACTGCTTT AATCAACTCA GAAATTTAA CTGACTAAT TTTTTTCAC
CATCAGTTT TTTTCGTGTTG ACTCTTTCTC CTTTTTCTGT TTGCCCAGAA ACATGCTCAG
GATTCTCTCA GGCTTTAAAA AATGAAAAA TGTTCCCTGC AATCTAGTTA CTCCTTGATT
CTCTTGTTCT GTTTATCGCT GGAATTCTTG AAAGCTTGGT GTATTAGTCT TTTTTCATGC
TGCTGATAAA GATATACCTG AGACTGGATA ATTTATAAG AAAAGAGGT TTAATGGACT
CACAGTTCCA CGTGGCTGAG GAAGCCTCAC AATCATGGTG GAAGGCAAA GGCATGTCTT
ACATGGCAGC AGACAAGAGA GAATGAGAAC CAAGGATT TCCCCTTATAA AACCATCAGA
TCTTGTGAGA CTTATTCACT ACCACAAGAA CAATATGGGG TAAACCGCCC CCATGATTCA
ATTATCTCCC ACCGGGGCCC TCCACAACA CGTGGGAATT ATGGGAGCTA CAATTCAAGA
TGACATTGG GTGGGGACAT GGCCAAACCA TATCACCTGG CCTATAGCAT TATTCCATT
TCTTCCCCAT CCTTTTATTC CTCAAACCGG TACAACCAGA CCTCTTTTTT TTTTTTCTA

N'

FIG. 6A(39)



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N'

CCTGAAGCTG CTCCTTTGAG GGTAGCTGAT AAGTCCAAA TACTGTCACC TTTTCTCAAT
TCCGTTCCCTT CTTATGCCTT TGGAGCAATT GACTGTGTTG GTTGCCCCCT CTTTAAAGT
GTCTCTCACT TGGTTTATG ACTAATGATG ATTTTCTTTT TCCTCTCTAA ACATTCCGCT
ATCTTTTLAG CTTCCTTCC CCTCCCATC CCTAAATGT CCTGTGTTCC CAGAACTGC
CTCACCTCTT TGAATTCTCT ATGCCCTGTC ATTCACTCAT GGGTCTTTAT TACATTATTG
CATCTGTGTC AATAACTCTG GTCTTTCTGT TAAGTTCAG TCCTCCCATTT TCAAAATGTC
CCAGACATTT CCAATTGAGT ATCTCTCCAA TGTATTTAAC CTGCTAAATA TCTAACACAT
AATCTTTCCC ATCAAATCGT TTCCTCTTAA GCTTTTCGTT ATTTCCCTATT AGACTCCTGC
ACTTCTCCCA GGAGCCAGA CTAAACCT TGAATTCTC ACCATAACCT CTCCTTTGTC
TCCCATAATC AATTAGTAGC AAGTGTTATC AATGATTACT TGACAATATC TTTTCTCTATT
TCCCTCCCTG CTATGATCAT TCATCTAGCA AGAAGAGTTG GCCCTTTGTA TCTGTGGTTT

O'

FIG. 6A(40)



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O' _____ P'

CTGCATCCCT GGATTCAACC AACTGTAGAT GGAAAATATT TGAAGAAAAA AGCGTCTATA

CTGAGTATGA AAAAATTTTA TTTCTTGTC TTTATCCCTA AACAAATACAG TATAACAACT

ACAGCATTTA CACTGTAGCG TATAGATCTT ATAATCTAGA AATGATTTCA AGTACACCAT

TATATATAAG GGAATTGAGC ATCTGTGAAG TTTGGTATTT GTGGGGCATA CTGGGACCAA

TTCCCCCATG GATACAGAGG GACAACTATA TTTACTCAGT GCTTACTAAA TACCAGTTGG

CCAATGTGTT TTTCTTTTTC TGTTTTCCCTG TCTTTAGTTT GCCCCTTGCC AATTAATTCA

ATAGTGCTGC CAATGCCAGG TGTACCTTCA GAATATTCTA TTCTAATTTT GTCATCTCCA

AGCTTAAAAA TATTTAATGG GCCAGGCGCA GTGGCTCACA CTGTAAATCC CAGCATTTTG

GGAGGCCAAG GGGGGTGTA TCACTGAGG TCAGGAGTTC CAGACCAGCC TGGCCAACAT

GGCGAAACCC TGTCTCTACA AAAAAGTATA AAAGTTAACC AGTGCTGGA GCATTGTCCT

GTGGTCCCAG CTAATCAGGA GGCTGAGGCA GGAAAATCAC TTTAATCTGG GAGGTGGAGT

FIG. 6A(41)



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P' _____ P

TTGCAGTGAG CCAAGATCTC TCCACTGCAC TCCAGCCTGG GTGACACAGC AAGACTCTAT

CTCAAAACAA CAATAACAAC AACAAACGAAA AACATTTAAT GGCTGCACCT TGCCTGTGAA

AAATGCATTT CTGGGCCAGA TGTGGTGGCT CAAACCTGTA ATCCCAACAC TTGGGGAAGC

TAAGGCCAGG AGTTCGAGAC GAGCTGGGAT ATATAGGAAG ACACAATCTC TACAAAAAAA

AATCCACAAA ATTAGTCAGG CTTATTGTTC ATGCCTGTAG TCCCAGGTAC TCAGGAGGCT

GAGGCAGGAT TCCTCAAGCC CAGGAGTTCA AGCCTTCCGT GAGCTATGAT GGCACAACTG

CACTCCATCT TGGGTGACAG AGCAAGGTCC TATCTCTGGA GAAAAAATAA AAAAGAAGGC

ATTTCTTAGG AGAGTTCTTC TCTGTAGAGT CCTAAGGGTT CCATGGAAT CCTTAAAGC

ATCAGAGTAT GTGAGTGCAA TGGGAGGAAG CATTTAGCCA GAGCAGTTGT GCTCCCATTG

CATATTAATT TTTAAAAAAC AAAGCTATAA AAAAAAGTTG AAAACTACTA CGTTAGCATC

AGCCTGACAT TTAATGGCCT CGTAAATCAA ACCTAATTG ACTTTTAGC CAGTTATGCT

Q' _____ Q'

FIG. 6A(42)

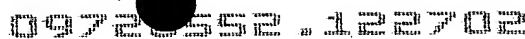


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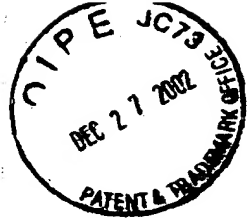
Q' _____ Q'
ACTAGCCAAC TACAGACAAC ACACTTTTAA ACCAAATTAG ACTAATAGTT GTCATCAGTG
GAAATCAAGT TTGCCATTCT TCCATGCCCT TGCTCACACC ATTACCTTTT CTGGAATGTC
CTGTACTCAT CTTCCTGTGT TGAACCTCTAT ACCCAACTTT AAAAACCTAG CTCAAAGTTC
AACACTTCCA TTCCATTTCA AAAAGAGCTT TCCTCTTTCCT TAAAGTTTAA GAACTCATTT
TCATGAATCT TTTTGGCATT TATTGCACAC ATGCTTGCTT TGTGTTATTT GTGTTACGCC
TCATATGCCC CCAAGGTGTT TTAGACTCCT TAACGGCAAA AATGATGCTC TAAACACCTT
TCTATCTTTC ATAGTGCTT AGTCTGTTTG TGTGCTATA AAGGAATACC TGAGGCTGGG
GAATTATTT AAAAAAGAGG TTTATTGGC TCACAGTTCT GCAGCTATAT AAGAAGCATA
GTGTCAGCAT CTGCTTCAGG TGAGGGCTTC AGGAAGTTTC CACCCATGGT AGAAGGCAAA
GGGGAGCAGG CATCATAT CAAGAGAGGA GAAAAAAG GAAGGAAGAA AGGAGGTGC
CATTCTCTT CAACAATCAG TTCTTGTTGG AACTAATGGG ACAAGAGGCT GGCACGGTG
R' _____ R'

FIG. 6A(43)



R'	GCTCATGCCCT	GTAATCCCAG	CCCTTTGGGA	GACCAAGTG	GGTGGATCAC	CTGAAGTCAG
	AAGCCTGAGA	CCAGCCTGGC	CAATGTGGTG	AAACTCCGTC	TCTACTAAAA	ATACAAAAAAT
	TAGCTGGGCC	TGGTGGCGTG	TACCTGTAGT	CCCAGATACT	CAGGAGGCTG	AGGTAGGATA
	ATCACTTGAA	CCCGGAAGAC	AGAGGTTGCA	GTGAGCTTGT	GCCACTGCAC	TCCAGCCCGGG
	GCAACAGAGT	GAGACGGTCT	CAAAAAATT	TAAAAACTTT	AAAAATAATA	GAGCAAGAAA
	GCACCAAGTT	ATTCAGGAGG	GATCCACCCC	CAATGACTCA	AATACCTCCC	ACCAGGCCTC
	ACTTCCAACA	CTGGGGATCA	ATTTCGGTAT	GAGATTGGA	GGAGACAAAT	ATCCAAACTA
	TATCACATAG	TAATGAACAT	AGTACCTTAT	CTATAGAAAG	CAATGGCTAG	ACAACTGTTG
	AATGGCTAAC	CAAATCTGCT	TTCCCTATGGT	CTCGCTCTAG	AGGGGGTCAG	TATGAGTTTC
	TGTCAAAGG	AGAAAAAAA	ATGTATAGTC	AGTTTGTGT	GTGTGTGTGT	TCATGTAAAA
	GAGATCAAGA	GAAAAGAACA	AGAGAAATCA	TGAAAAGGAG	GGGGAATATA	AGAATAATAC
S'						
S						

FIG. 6A(44)



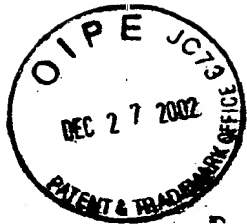
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S' _____ T'

ATAGAAAAA GCAAATTATC TTGTTTATCA GTAATACCCA AGGGGTAGA AATGGTAAGT
AATAATCCTT CTTCACTTG TCTGTAGTTC ACTTTTTCG ACCTTTATTT TGATGAATC
ACATCGAAGA CATTAACTCA TTAAGGCTTC CAATATTTT GGAGATAAGA AGGCTGCTA
TGCTCTTTAT AGATGGAAA CTGGGTCAT TAATACTCA AACAAAGACA TAACAAAGAA
ATGGAGCATA AACTGCCAGG TCCTGACTGT AGATTGGAT TCCCAGTTGG TGTCTTGTC
CCCTTTGTTA CTCTTCCTAA AGTTATGATC TTTTCTTGTG CATAGGAAAT TCATAGTGAT
TTCCCATCAC CCTTGGGATT ATCATAGCTC CTTAAAGTC CCCCTATGC ACTCAATAAC
ATCAACAGTA AGTGTTCTTC GAGCACTTAC TGAGTGATA TCATTGTGTT CTCACGCAGC
ACCCACAGAT CTCACCAAGA ACCTAGCTGA AGCCTGTAGA ATGAATAGGT AAGTACTGCC
ATGCCAATCT GGAGTACTCA AGCGATGCAA ATGATTCCCTT TAAATTGTACT TTTGCAGGCT
TGTCAAGTTT GCTCATGGAG AAGTGGCTAC TGCATCCATG TTATATCTAT GTAATGTTGG

FIG. 6A(45)



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T' _____ T'
ACTGCGAAGC ATCACTTGAC TTTTTC CAAG CAGAAATTAC AGCTGATGAC AAGCTGCTGC
TGAGAAAATG GATATTTTC TGAATTCAGT TCTACGTGGA AACAGCTGAC TAGTTTCCAT
TGCTGTAAGA ATGGCTCTTT TGCTCTTGGT TGATTTTGAG TAATGGCTTT ACTTCTGTAG
AAAGGAGATT TCATTTGAAG TCCACTCAGG GATTGGTTC AACAACTGG AGTACAGGTT
TCAGAAAATA TCTCTTTAAT CCTCCAATAA TAAATTTTCT CATCTATAAT TCCTGGAACA
CTTCATCCTT TGCAGCCGAG CATATAGATA GATTGTGTC TCACTGTGTT CTGATTGCCA
CTTTGACCTG CTTTTCAAC TTAGGTTACA AATAGAACAG AATCTCTCTG ATTTTCTCA
TTAATTGTTT GAATTCCCAC TTTTCCCTCAT TAGCAAGAAG TCCAGTATCT TCCTGAGAAC
TTCTTTTCT CAATCTAGGA ACTTACTGG TCCATAAGGT AACAGTCTTA TTTCTGACTA
TCAAGGAGAG AAATAACAGG AGCCATTATC ATCTTCATGG TGTCACTTTT GAAAACTGGT
CCTCTGTAGA TCTTCAGATT CTTGCGTTAG TCCATTTCAGC TGCTATAACA AAATTGCATA
_____ U'

FIG. 6A(46)



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U' _____
GACAGCATGG CTTATAAATA ACAGAAATGT ATTTCTGACA GTTCTGAAGG CTAGAAAGTC
AAAGATTAAAG ACACTGGCTG ATTTGGTGTC TGGCGAAGGC CCAATTGCTC ATAGATGGAC
GATGACCTTT CACTCTGTCT GCACATGGCA GAAGGGCAAG AGAGCTCTCT GGGTCTTTT
TATAAGGGCA CTAATCTCAT TTTTGAGGAC CCTGCCCCCA TGACTTAATC ACCTCCCAA
GGCACTGTCT CCCAATACCA TCACCTTGAG GGTAGGATT TCAACATATG ATTTGGGG
GACAGAAACA CGCAGTCCAT CTCGCTTGTC CACTCCATGG TGGTATTCTT GCTGGATCAG
TTTCCTCCTT GGGGTGCATT TGTGTTCCAT GTCTAACTTG CAAGTTATAG CAGGCCCGAT
AGCAAAGTAT TCCAATGTTG GTATGCAGAG GCATTGAATA ATCAGAAATGA ACCACGCCA
TAAACAACATG GTAGAGCTGC AGAGAGTACC AGCTGATTAT GAGCCCTGGG TAACAGTGGT
TTTTAGTTCC TATGTCCGTC AGCCCTTTTC TCCCATAGTA GCCCCACTGT GTTGAAGTGG
CTGAATCGAC AGAAGCTTC AGCTGGGCC ACATGCTCAT GGAACCAATT CTCCTTATGA
V' _____

FIG. 6A(47)



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V' _____ V'
GCCGTACAAG AGCTGGGTTG CCATTCTGGA TACCCTCTTT TTTCAAGAGA TTTTATTCA
AGGATAATTT TTCTTTTATC AACTACAGGG ATTATTAGA ATCTTAGGC AGTGTGCC
AACCCTTTTG GCCCCAGGA CAGGTTTGT GGGAGACAGT TTTTCCATGG ACCAGTGCA
GGGGCTGG AGGCATGGTT TTGGGATGAG TCAAGTACAT TACGTTTGTT GTATACTTA
TTTCTATTAT TATTATATTG TAATATATAA TGAATAATT ACACAACTCA CCATAATGA
GGAATCAGTG GGGAGCCCTA AGTTTGTTTT CCTGCACTA GACAGTCCCA TCTGGGGGA
ATGGGAGATA GTGACAGATC ATCAAGCATT AGATTCTCAT AAGAGTGCT CAGCCTAGAT
CCCCGGCATG TGCAGTTCAC AATAGATT T GCTCACCTAT GAGAATCTAA TGCCACTGCT
GATCTGACAG GAGGTGGAGC TCGGGCAGTA ATCGGAGGT TGGGGAGCAG CTGTCAATAT
AGATGAAGCT TTGCTCGCTC GCCTGCCACT CACCTCCTGC TGTGTGGTCC ACTTCCTAAC
AGGTCACAGA CTGGTACTGG TCCATGGCCA GGGAGTTGG GACCCGTGCT TAGGGAGTAG
W' _____ W'

FIG. 6A(48)



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W'

W'

GGGTGGAGTT CCCTTCACTT CTAGAAGCC CTGGATTAGT ATCCAGAGC TGTCATTACA
GAGTATCACA AACCAGGTGG CTAAAAACAG ACATGAATTC TCTCTTATTT TTGATGGCTT
GGAAGTCCAA AGTCAAGGTG CTGCCAGGC CATGCTCCCT CTGAAATGTG TAGGGGAGAA
TCCCTCCCTC CTCTTCTAG CTCTGGTG TTTGCTGGCA ATCACTGGCA TCGCTTGGCT
TGCAGCACTT CAACATCTGC CTTTACTGTC TCATAGTGTT CTCCCCTCAT GTCCTCAGGT
CTCTCTGTCT CTCTTCTTTG TATAAGGAAA CTAGTCATAT TGGATTAAAG GCCAACCCCTA
CTCTAGTATG ACCTCATCTT AAGTCACAT GCAATGACTA TTCCAGATAA GGTACATTC
TGAAGAACTG GGAGTTAGGA CTTCATATCT TTTGAAGGAA CACAGTTCAA CCAATAACAG
CCCCTGTA CT GTTTTACAAA TAGGTATTCC TCTCCTTCCC AAAGTTCTTC ATAGCAGAGA
CAACTTGTA CAAAAGGCAA AATACCTTAT TATGTAACCT TAACCTAGGA TCATAGATCC
CTACTGTCTG GTGCTTTATA AGCACAGAAC CACCGGAAA TCATTATTAA GACAAGGAAA

X'

X'

FIG. 6A(49)



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X' _____ X'

GGCCAAAGTGC AGTGGCTCAT GCCTGTAAATC CCAGCACTTT GGGAAATTGA GCGAGTGGA

TCAACCTGAA GTCAAGAGTT TGAGACCAAA CTGACCAGCA TGACAGAACC CCATCTCTAC

TAAAAATACA AAAATTAGTT GGGCATGGTG GCATGTGCCT GTAATCCCAG TACTCAAAA

GACTGAGGCA GAAAAATCAC TTGAACCGAG GATGCCAAGA TAGCAGTGAG CCAATATCGT

GCCACTGCAC TCCAGTCTGG ATGATAGAGC AAGATCCTGT CTCAAAAAAT TAATAAATAA

ATAAAAAGAC AAGGAAAGCC TTTTCCAAGG AGACCCTTCT GCTTTGCTAG TTCAGAGAAC

TTCTCTTTTG GAGAAAACAA ACACCCAGTC CATTAGCAGC AACGTCAGGG ATTGAATTCT

TAGGGCAGCA GGCTGGGCAC AGTGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCTGA

GATGGGTGGA TCACTTGACA TCAGGTGTTT GAGACCAGCC TGGCCAACAT GTGAAAAC

CATCTCTACA AAAAATATGA AAAAAAAAAA AAAAAAAAAA GCTGGGTGTG TTGGCTTATG

CCTGTAGTCT CAGCTACCTG GGAGGCTGAA GCAGGAGAAT CACTTGAACC CGGAGTTGG

_____ Y'

FIG. 6A(50)



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Y'

AGGTTGCAGT GAGCTGAGAT TGCCCTACTG TACTCCAACC TGGGTGACAG AGAGAGACTC

CATCTCAAAA AAATAAAGAA TTCTTCGGGC AGCAGTCTTT CCTCCACCTC ATAGACCATG

GAGGTGAGCC AGCTCTGACA AACCATGAGA ACAATGGCAG AGACATACCT GTAACGTAAC

TGACTGGGGC AAAGACAAAAG GTGAGGAAAA TGACAAGTTT GAGAACTAT GAGACCAGGC

AGTGGGAAC ACCACTAGCA GAAATGATGG AAGTTCTCAA GAATAACAAC AGAGAAATAG

ACCATGGCCA GAGCTAGAA CCTCCAGGG AAAGGAGATG GGCTCCAGAG GCAGAAGAGG

ACGTTGAAGG GAATGGGGAG TGGGTGAAAT ATATAGACGA TGGGGACCAC CCAAGAGCAG

TCGCTATTGC AAAACTGAGG AGAAGGAGAG TCTGGAGGGG GTGTTGGGAA GCTGGGTCTC

CTAAGGAGGT TTGACAAAA GCAGTCATGG AGCGGGCTTA GAAATCACAG TTGGGGACAG

GGTAAAGTTC CTCGGGATAT AGAGGATGAG ATTAGAAGAG GTTCCAACTA GGTAGTGTG

GAGAAAAGCA CTATTGACCC AAAAAGGAAG GAGAATGTGG GTGGAAGTGG CAGAGAAAGA

Z'

FIG. 6A(51)



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Z'

Z'

GGGGTTTGAG CAGAGAGTGG TGATTTTCT AATGCAGAGT TGTGGGAGGT GGAGTGCAGG
GAGCCAGGCT GGGTGGCTGT GCTGATGTGA TTAAGCACTT ACTGACTGCC AGGCAATGGG
CTAAGTACCT GAGATGCTTT GTCTGTTATC CCTCCCCGAAA CCCCTCTGAG CAGGTGCAGT
TATTATTCTC ACTTCACAGA TAAGGAAATT GAGGCACAGA GAATTGAGTA ACTTACCCAA
GGTGACATAG CTCATATATG GTAAAGCAGG CTTTGAACTC AGTCTAGCTC CCGAACCTAA
GCTTGTAACCT ACTATGCTTT TCCCAAAAAA AGGGGGCTGG CACAAAAAGA GCTGAGGGGG
CTGGGCATGG TGGCTCATGC CTGTAATCCC AGCACTTCGG GAGACTGAGG CAGGTGTTTC
ACCAGAGTTC AGGAGTTCTGA GACCAGCCTG GTCAACATGG TGAAGCCCTG TCCTACTAA
AAATACAAA ATTAGCTGGG TGTGGTGGTG TGCACCTGTA GTCCCAGCTA CTTTGGGAGG
CTGAGGCAGG AGAATCGCTT GAACCCAGAG GCGGATGTT GTAGTGAGCC AAGATCATGC
CACTGGACTC CAGCCTGGGT GACAGAGTGA GACTCCATCC AAAAAAAGA AGAGCTGAGG

AA

AA

FIG. 6A(52)



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AA

AA

TGATGGCCAC CATCAGCATC AGCCTGGAAG TTATAGCAGG ATGCTAAGTT TCTCTAAAGC
TGTCTTTTCTT AGGACTTGAA AAAGATAACT TGGGTTTGTA TCCCATCTCT GCCATTAGTA
GTTTACTGGC TTTGGATAAA TTTACTTAGCC TTAGTGAACC AACTTTGGAT TTTTATAGAG
ATACTGTAAT GAAAGGAATA AGGTATCAGT CTTAGCAGAG CATCCAGAGT GTTCCCTATTA
AAACCTAAAT CATATCCTGT CATTGCTGTG CCCCAAACCA TTCAATGGCT TCCCAACTCA
AAGTTAAAAA CTCATCTTTC CAGTGGCCCTG CAAGAGCCCTA TGCTATCCGG TGTCTGACCT
CATCTGTTGT TCCTTTCTCC CTCCCCTTTCT TGGCTCCAGA CGCACTCTGG TCTCCCTTGCT
GTTCCCTTGAA TACACCAGGC ACACTCTCTT CGCCTGAAAC ACTTTACCCC AGATATCTTA
GCTTACTCTC TGCCTCCCTC AATTCATTGA TGAAATGTCT CAGTGAAGTC TTCTCTCTCT
CCTCTGTAAA AGTATACTCT CTGTTCCCTT TCTTTACTGT TCTAGCTACT ATTGCTGTGT
AACAAATCAC TCCCCAAATT TAATGAGTGA AAACATCAGC CATCATCTTA TTCTCACGG

BB

BB

FIG. 6A(53)



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BB

BB

TTTCTGAGGG TCAGGAATTC TGGAAGGGCT CAGCTGGGAG GTTCTGGCTC TATAATCTCT
TATGCAGTGA GAGTCAGATG CTGGCTAAAA CTGAACACAAA GCAGGGTTCT AGTAGCTGAG
GGCTGGCTGG GTCTCTCAGA TATAGTTTACG ATCTCCTCCA GGGGTCTCTT CCACGTGGGC
TAGTCTGAAC TTCTCTCACAG CATGGTGCC TCAGGGCAGT GGAATCTGCA TAGTGGCTGA
AGGCTTCGCA GCTGAGTATT CCAGCAAGCA AAGTGGGAGC TGTATTGCCT CATATGACCC
AACCTTGGA TCCACACAGC ATCACTTCCG TGTATTCTAC GGGTTGAAAA GTCACAAAAA
CCAACCAGTT TCAAGGAGAA GGAACAGAGA TCACATTCTT CAATTGGAGA AGGTCAAAG
TCACATTGTA ATCAGAGCCT ATGGGATACG AAGTATTGCG GTCAGGTATG AAAAATTGTA
TTTGCTGCAT CTGCTTTACT TTCTCCACAG CGTTCATGAT CTGCTTCTCA CATGATATTG
ACTTACGTCA TTTCTGCGTT TCCTGTCTTC CACACTAAAA TGTACGCCCTG TTTTGTTCAC
TGCTGTATCC CCAGAGCCTA GCACGGAGCC CAGCATGTAG TGGTATCCAA TAAATACTG

CC

CC

FIG. 6A(54)



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CC

TTGCATGAAT GAATTCTGTC TTTTAATCCT AGCTATAGGT TTCTAAGTTA AATATTACTA

TAATCATCTT ACAGACGAGG GAAATGAGGC TCAAGAAGAT TTGGTAACTT ATGCGGGATC

ACTCAGCCAC ATAATGGAAG AGACAGCATT GAAGTACACA TGCTTGCTCT GTCTGCTCTT

CCAAGCTGCT CATCACACAG CTGCACCTCT GAGGACTTCC CTCCCCAGTC CACCTCCACC

CTTACCCAGA GACACACATG GCCACAATCC ACTAGCAGAC CAAATTCAA TTTTTCCTCCA

GTTGGTTGCA CTCAAGCTGA GAGCAAAGCA ATTGCACCTT AAATCCCCCTT ACAGCAGATA

TTTCAGAGCA TGTTCGGAAG AACCCATCAC ACTTGGCTTT TAGATCTTAT TTCTGGTTTG

TTACAAAAC ACAATTAAAT GAAAGGTTAG GTAGCTTTTG AATGGCCAGC TCAAAGTTT

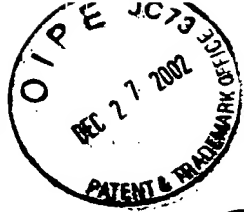
GGCTTATTTT TGCCTTGCTG TCTTTATAGG CATTTTACCA ATATTATCA CTATTCCCT

TAGGGAACCC TTAGATCTGT GATATTGAA ATAATAAAGC CTCTCCATTG GCCCTTTAAA

AGGTTTGTTG TAAAACCACA CCATTAACAT TCACAGTTCC TTATTATGA GGCCTGATTG

DD

FIG. 6A(55)



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DD

DD

CACTTATTTC CATATTCTC ACTGTTTCTC CGATGAGGAT TTCACATAAT AGTGTTTGAA
GGCTAAAGAC TTCAAAGCAG ATTCTTTACT ATTTTATCTC TGAAAAATAT TCAATATTG
TGTAATTAAA GTGAAGTCTT CCTAGAGAAA ATGACAACTC AAATAATCTT AAATGTACCT
CCAAGAAAAA AGCTGTCAAA GTGACATTTA GTAATAGAGT CACATTCTCT AAGGCCTTG
CTTCTCCTTC TGATTCTTAT CATCTTTGAA GGTATGTCA TGGGCTGACT TCAAATCAAC
TTTTTAAATT ATTATGGCCT TCTTTAAATG TGAGTTCTGA AGTGAGGGG CTTTATCTTT
CTTTTGCTCC AGATTTTTT TACCGCGTCA TTACCAAGCA TCTTAAACA AACCTAAAA
ACAAAAATCT TCCTTGACCT GGTTTTCCC ACTAGCTAAC ATCCATTTT TATCTTTCCC
CTTTGCACTA AAGGTTTTTA AACGGATCTT TATACCCCTC GTCTCCATTT TCTCATCTGC
TAACTTATAT GGCAAAGATT ACCACTGCCT TTCAACATAA TTGGCCAATC TACAGAAAGT
TTTCAAGTTC TCTTTTAAAT TGACCACCTC CTGCCTACCT CCCCACCTTT GACATCTGC

EE

EE

FIG. 6A(56)



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EE

TTCTCACTTG GCACCTTACC CAGTGTTCAA GATTCCTCTCC TTAGGATGT CTTCAGAGCA
GCTACACAGT TGGTACTATA ATTTATACAT CCTTGTTACAC AGGGCTTGCT GGGATATTGA
TGGAGAGAAG GAGGAAACTG GAAGTAGTTC AGGCCAGAGC TAGGGAATTT GACCCATCTC
CAGGTCTCAG GTCTGCAAGG GGAGCTCACA GCTTAACACA TGGAGTCTAG AAACCTGTGC
TGGACCTTGA CCAACACCAG CCCATGGAGT CCAATACAGT GCTCAATAGG GATTTCCAGG
AAATTGCTAT ATTTATTCAA AGAGAACTTA CCAAGTGTC GCTACGTGTT GGGCATTTGTG
CTAGGCACAG GGACCACAAA GATAAGACAT TGTAGCTTTC CTTAAGTTGC TCACTGAGTA
AATAGAGAGA CAGAAAGGTA AACAGGTAAG TGCAAAAATA CATACAATTC AGCAATAGTG
TTCATAGTGG CTATGGAGAG AACGCTCACT AACTTTGTTT AACAGTTGT TCTTTCAAGG
ATTTGACATG GATTGATTG GAAAAGCATG ATACCATTTT TTGCAATTAA ACACAGGAAT
ACATAAATAA AATGCATCAG TATTTTTTAC AAATAGCTAC TAAGAGCTAC TAGAAAACCT

FF

EE

FF

FIG. 6A(57)



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FF

GGGAATTCTT AAAACCTTAC CATGCTACTT GCTCTAAAAT ATTTATATTT ATGTTATTTT
GTACATTTCT TTACCTACAC AAACACCACT GTTTTCTTCA TTTCTTAGTC TATTAAACC
TCACACCCTT TCAGCATCTC TTAATTATTT ACTACCATCT GTTAGTTCTC CTGTCCTGAA
TGAAACAAA ATGGCAGAAT GTAAAACGAG GCGAACAGA TTTTGACAG GAAGTATCA
GAGTAGAAG GAAATAGTCA AGACACATAT GATAACGAA AACAATAATA ACTTATACA
TAACAACCTA TAGACACATT TAAAAGTTT AAGATCTCA GAGCTATGTC TGAATAGATA
GGAGTAAAA CTCTATTAAG TAATTAGGAA AATAACAAGA ACAGTGAAT TCTTAATGAA
TGGCATGTAA TCAAAACTGT ACTTATCGTC TAATTCATAA TCTTGAAATGT TTTTATTTA
TTTATTTATT TTTTATTTT TTGAGACAGA GTCTTGCTCT GTCACCCAGG CTAGAGTACA
GTGGCGTGAT CTCAGCTCAC TGCAACCTCC ACCTCCCAGG TTCAAGCGAT TCTGCTGCCT
CAGCCTCCTG AGTAGCTGG ATTACAGAGG CCTGCCACTG CACCCGGCTA ATTTCTGTAT

GG

FIG. 6A(58)

GG



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GG

GG

TTTTAGTAGA GATGGGGTTT CACCATCTTG GCCAGGCTGG TCCTGAACTC CTGACCTCAT
GATCCACCAG CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCCA CCACGCCTGG
TCGAATGTCT TTATTATTG AAGAGACAAC ATGGGCCTTA AATCTGTCTT CTATTGACA
GACTTTGATG GAGTCAAATC CCAATGCTGC CACTTACTGA ACGGCCTTAA ATGACTTAGT
CTCTCTCAGC TGTCTTTCTG CATATGTAAG GTGGAATAAT GATGGCTTTC AAGGAGGAAT
AAACCTATGA AAAGTGTTGA GGATAGTGTT TGATATGAAA TAAGGATTTC AACAAGTAGT
AGCTGCTATT GAAGATTAA GAGTTATTTA TTACAACATAT TTAATAAAAT TTTAAAAACT
AATACACTTA AATTATTAAA GAGCTTTGAA ATGGGCCAGG CGCAGTAGCT CCTGCCCTGTA
ATCCCAACAC TTTGGGAGGC CAAGTGGGC GGATCACCTG AGGTCAGGAG TTTAAGACCA
GCCGTGCCAA CATGTTGAAA CCCGTGCTCT ACTAAAAACG CAAAAATTAG CCAGGTGTGG
TGGCATGCAC CTGTAGTCCC AACTACTCAG GAGGTTGAGG GAGGAGAATT GCTTGAACCT

HH

HH

FIG. 6A(59)



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HH

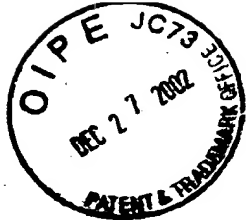
HH

AGGAGGTGGA GGTTGCAGTA ACCCGAGATG TCACTGCACT CCAGCCTGGC AACAGAGCAA
GACTCCATAA AGACAACAAA AGCTTTGAAA TTGTGTAAAT GAGTTGTACC TATCTTCATT
TAAGAAATTC ATCTTTGTTC ATTTATTTTT ACTTGACATG AGAGCTTCCA GCAATTTTAA
ATTAAGCCCT CACAGATTTT ATGTCACCTGG CTATGTGATA AACAAATTAT TTGCTAAAAT
AATATCTTG CTTCCTTTTT AAGGAATTGT CTCCCTAGAA ACGGTTGTA CAAACAATA
CACTGACTTT ACACAAAATC AGATCTGATT GGCAACAGTT GCAGATGTTT TCAAAAGATT
TTCATTTGAG AAGGGGCCCA TTTGGGTAT TTAGATTCTA AGAACTGAAA CTGCTTTGTT
CTGTTTTCT GGCTTCTGGG AGAGGAGGAG ACATGAATC AGTTAGCACC TTGGTATTTT
CTTTATCCTT CATTCAATA CAGAAGATGC TTCATATGCA CAGTGGTGC AGGTCACATC
AAAAGAAAG GAAACAGTTT CTGGGTTTTT AATTTCAAC CGGAAAGGAA AGCACCCAT
TTTGTTCCGC TCTAATTAGC CAGTGCATGA CTTAGAGAGC AGGCAGATGC TTGAAGGCG

II

II

FIG. 6A(60)



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II
TGGTAACACA GGTCTTCATT AATCTCCACG CAGGACTTGC ACTTCTACTA TGCCTAGGCT
GAAGAAAATG GCTCAGGAAG ATGAACAATC TCACAGAGCC CTAACATACT GAAGCCAGGT
GTTATAAAGC ACAAGTCAAG AGGGTGAGAA ACTAACGTTT TTGAAATCTC CCACTTCTTT
CTACGTCAGA AGAGCCAAGC TGATTATTTT AGTTGGAATT TAGAAATTTT TAAAAATTAT
TCTAAAGTCA TGAACAAGCC TAATTATAAA GATAGTTGCT GTGAAGGTGC TGAAATAACT
CGATTTTACC AACCCCTCTT TCTGGAGGAA GCCATAATGG AATCCTGTAC AATGTTCACT
CTACCAACGA ACTCTTGTTT TTCTAATGAG GAAACAGAGG CCCACAGTAT TAACTATCT
TAACCAATAC AAAATGACTA GTGCTCTGGT CCTTTTATTA AGCACTAAAA TTTTGATCCA
ATAATAAATC TGTCCATTAG AAGGAGTTTC CCTAATGTAC TGGTCTAAC TTGTTCCCTT
CAAGGGCCA GTGTCCCGTA CACATAGCTA AATGGGACTT CTCTTCAACT ACCATTACCC
AGAGGGCAGA ACCTAAAATG CTGTGAATGA CATCTGCTG TTCACATCTC AGCAGCA
JJ

FIG. 6A(61)



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JJ

JJ

GTGTTGCATT TGAGCTTCTG CAGGGCCACC CAGGACCTAT ATCTGCTCAG ATGTTTAACT
CATCTAATTC AGTGAACACT TCATTCTAGT TAACTGAACA TCTACTTTGT ACAAGGCACT
ACAGCGGTTT AGAGATGAAT AAAATCATGA GATTCCACTG TCTCCTATAA ACCATCACTT
TGGGAAATTT TAGAAATGTG GGTAAAGCTCC AGGGCTTCCT GCAGCGTAGA AGTCACAAAC
TCAAATGCCT GCAGAGGCCC AGCTGACAAC ATAAGTAAAT GATTCTGGCT GGGCGGAAAA
CAATTACGGG TGGGTGGGTT TCCAGCTGGG GAGTGCACGC CTGTGTTAAA GGACAGCTGC
TACTCATTTC CAGCCAACTG TGTTCCTCATG TAGAACTGCG GCCCAGTGTA GCCAGTACCG
AAGATTTCCT AGAAAAAGCC GGAGATCTCA ATGTTAGTGT AAAATCTCTC AAATTTCCAA
GAGGATTATA TGGGGCAAAG GTTCTCAGAT CAGTTTGCAG TCTCTTACTT AGCCCATGTG
CAGAGCAGTC GTAGAGGGTA GCATGCAGTG TCCTACATAA TAAATCTTTT TTATTTTATT
TTATGCCTTC CTCCTTCCTG TCTCTCTTTA ACCTTTCTTC TTCCCTCAGG CTGGCTTCTT

KK

KK

FIG. 6A(62)



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KK _____ KK

CCCTCAGCCT CGTCCGACCC CAGCCTGGGT TCAATGAACA TTCGGTAAAG GAACACGGAA
TGTC AAGCGC ATTAGAGACA ACCTTGAGAC ACATTCCTCT TCGCGTAAGC ACTTCACGTG
AGATTTTAA TTTTAAACAA GACAATGTTT ACGACTTGCT TCTTTCAGGG AAGAGCGATA
TCAATTTTAG TGAACACTTC AAGGCTGAGA TACGCTAGGA GAGTCGTGTG GTGTTGCACA
GCAAAGAATT CCACTTTGAA GCGAGTGGA AAAAAGCAT CAAATGCCAC ATGTAAC TCA
CCGCC TGAAG GGTACATTG GTATGAAACC TGGGTTTAAA AAGGACCGA ATAGACTAGC
CAT TAAAGA CCTGCGTACA ACCTCTCTCT CTCTCTTTGA GAGATAATGT ATCTGGACAA
TAAACATGAA CAGAGTGGAG TCTATCCTGT TTAAAACATT GCCTACTGTA CAGGCACCAG
GAGCTGAAG GTCAGAAATAT TAGCAGTGGG AGCTTGATTA GAGTTGATGA GAGATGGGTA
GTAGGAGGAA AGAGTGAGAT AGAGGAAGAG GACATGGGG TTACCCATAA GTGGAGAGTA
GAAAAGTAGA ATCAGCTGGC CATCAAAGG CGTGGGACTG AGGAACAGTA TGGCATGTAT

LL _____ LL

FIG. 6A(63)



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LL LL

TAAATATACT AAGCGCTGAC ATTGGAGGAG AACTAGGAAG TTAAATGAAA TCAATAGGGG
ATGATGGAGA ATAGTTAGGT GTGCAGGGAT TAGGGTTATG ATAGAAATAC ATGTGAATAC
ATGCAGTATT GTCTGGAAA ATGGTTAACA GTTGGTTCTC CTGGGGGGTG AGGGGAAGCC
CTGATTTGTA ATATTGCCT ATTTCTGTGG TGCAAATACT CCCACCATGA CCAGTTTCAA
GCTATGAATG TTGAAGTCAC AGAAGCAGG TTGGGAGGAG ATGCGCACAT TTGTTCCCCG
GCAAGGTGA AGTAAGGAA GGTGAAATCA ACAAGGTCAA AGAAAACTCA AGATTTCGAG
GTGCCCTCAGG TCTGAGGGGC AATGAAGTCT AGGAATGGCT GTGCTGAGGT AGCTGAAAATA
GAAGTGACTG CAGAGGTCAT GAAGCTGAAG AGGTGAAAAC AGAAATTAGA AAGGCAAACC
CCCACCGCCC AACCCCCACC CCTGCAGCCA GTTTC TGAGG GTGACAATAG AGGAAAGGGT
GGAGATGGAG TTCAGGTCCA GAAGCCATAG AAGCGAGTGT GACATTGTGC TCAAGGTCAG
CACATGTCAG TGTGGGGTGT CACATGCTGT TGTGAACCAT CATTATCAC CAATTATGGA

MM MM

FIG. 6A(64)



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MM

MM

AGACCTCCTA TGGGCATCTT GCCATATGCA TTATAAAGAT GTGTAAGAAG ACATTTCCCT
CCTTGGTG AGGAGAATTA GGGCTGTACA CAGATACTGT AGAGTGCCAT GTGCCCTGGTA
CAGATAAGGT GTGTTAGAGG TTAAGAAGATG AGGCTCTTAA TATTAATGAT AGATCCCAC
TACCTGAGTC TGAATTACAA TGTGCCCTAGC ATTAAGTGTT TTACCTGCAT TCCCTTTGAC
GTTCAGAACA ACCCATTTTA CAGATAGGA AATTGGGTCA GAAAGTTTCA GTAACCTTATC
CAAGGTCAAC ACAATTGGCA AGTGCCAGAG CTGAGCCAGG AACTGAGGTC CTCTAACAC
CAAACAGCTT GTCTCCCCAA TCACTGTGCT ATTTTCCCTCC CCCAGAAGAT AATACTCTGA
TGGAAATGAA GGATAGTGTA ATAGGAGATT CGGTGTTCCCT TTTTITAAAA AAAATTCAGC
TTGCATATTC CTAAAGAGTC AATTCATGTT TAAAAAAAAT TTCCCTTTGTG CTGCAATGTG
ACATGTATTT TTAGGATCTG CTGTTAGCAA GTGTATTTTT GTGTGATGA GTGGGAGAGT
GGGAAAAGTT TTGCAGAGCT GTTGAAGCCA GAATGCAGGG GGGCTGCCA GCAGAGACTG

NN

NN

FIG. 6A(65)



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NN

NN

TAAATCTCT GCCATCTCAG GTCTTGGAAC AAGCACAAAG AGATGTGTTC TCGATTATT
ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTAAATG
ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTTCTGAGA
TGATAAAACC ACAAGTGAG GAAACGTTA AACTGCTAA AGCAAAATG ATACACAATA
ATGGAGAAGG AGAAAAATTG AGCTTTATTG TCTGCCTAGG CAGATGGCTG ACCACTAGGT
GGGCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTTCTGGCG AGGAAGATTC
ACGCTTCAGC TCGGTCCACA AGATCCCTGC TCATTCTTTC CTAGATTCCA TTTTCTGCCT
CCTCTCCATG ACTGGGTCTG ATGGTTGATC CAAACGGCA ATTGAAATCA GAAGGTACC
TTTACCTTAA AATGCTTTTC TGGAAATAAA AGGACATGAA AAGTAACTAA GGACCGATT
TCCTAGCCGT CTTTCTCTCC TGCATGCGCA ATTTATCCCC AGATATAAA TTGCCTGCTT
TGATAATTAT ACCCTCTAAA TGAGGGGCAA GTGGCTAATT ATGCCACAT GTGGCCGATT

00

00

FIG. 6A(66)



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00

GCACTCCCCA TTAGCCAATT ATGTGCTCAA TTATTGTGTC ACATGAATAA TTGCACTCAT
GGAAAATAGC GCCCTCCTTT CAAATCCTCG TGCTTGGAGT GGCTGATGGA GTAATTGTCA
CACTGGAAAT GCACTTGGTG GGGAGGGAAA GAGTATCAGA TACCAGGAAA CGCATAAGTG
ACCAGAGCTC GCAGATGTTT ACTGCCACAA ATGGCCTTAG GAGCCAGAGA GAGCGGAAG
GACCACAGGA TGGAACGGGC CAGCCTGTGA GTTAGGAAGC CTGCTTCTGA AGTTGCCCTGG
GCAGCTCATG TGCGGTGACC TTGGGCAAGT CATTAACTTT CCTTCAGGTC TAACTGGTTC
TGCATACACA ATGAGGATGG TAATAACGCC CAATTCCCAT CACTATCGTG GGATGGATCA
GACTATTAA AAGGATTAC AATCTGCTTG GGTAAAAGCT TTACATAAAT ATGAGGCATT
ATCATGTCGC TTGTTACATC TCCAATTATG AAGGAAGGT AATGACCCTC CACAGCAATG
CAGGACTCCT GTTTGGAGG GAGGAAAAGT TTGAGAAGGA CAGGAAGCTT GTTGCCCCAG
CACTGATGTT TCTACTGAGG TACCAGAAAA TGTCATGTGG TCATACAGAA TTCAATTATT

PP

FIG. 6A(67)



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PP

CATTCAACAA ACATCTGTCA ATTGTTACAC TGTCCCTGAGA ATTTGGAAAA ATGATGAAAG
ACTCAGTCCT GCCTTAGGAG GTCACCTGGCA CATGGCCCG GGGCCCTGTT TTGGGCCCTTT
TACTCTGACC TGTGCTGATT TGCAAAATAGT GGGAAATTTT ATCTCAAGTC TATGAAATCT
GGCATGCATT TTCACGGTTT GATTGCCAGG TACATTGAT GGCAATGAGT CTTATAATGT
TTGGTTACCT TCATTACCT AAGAACTGTG GTTGTGCTG TGGTTGTTGT TTTTGTGTT
TTTGAGACGG AGTCTTGCTC TGTCAATCCAG GCTGGAGTGC AGTGGCATGA TCTCCGGTCA
CTGCAAACTC CACCTCCCAG GTTCAAGCGA TTCTCATGCC TCAGCCCCCT CAGTAGCTGG
ATTACAGCG CGCACCACTA TGCCCGGCTA ATTTTGTAT TTTTGTTCG GGACACAGAT
TTCACATGTT GGCAGGCTG GTCTCGAACT CCTGATCTCT GGTGATCCGC CTGCCCTCGGC
CTCCCAAAGT GCTGTGATTA CAGGCGTGAG CCACTGTGCC CAGCCAGAAC TGTGGTTTAA
ATGACAATGC TAAAAAGTGG TATATGTCAC AGTGTCGGGT GGGGCTAAGA GGCACATTGC

QQ

FIG. 6A(68)



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QQ

QQ

TGCAGTGATC CATCATTCAT TTCCCAACCAT TCTCGCCTGG ATTAGCGCAG CAGCTCCCAG
AGAGGCACCT CACTTTGACC TTCTTCCTCA AAGACATTCT CTGTGACCCTG CCTGGCCCCCTT
ATTACCTCTC TAGCTTTGCC ACTTCCCTAT GTCTCCATCT CCCCTCTCAC ACGTAGTAGA
AAGAGACTCT ACCTCATGGA GTAAGGAGAG GCTTCACAGA GGCAGGATTG CTATTAGTCT
TCAAAGATGA GGATTTTGCT AAATGAATGA GACAAAGGGA TTGGGGCCAC ATTACAGGGA
AATTGAGGTA TGTAATAGCC TGGTGCAGGT TAAGAGTGTG GACTCTGAAA CCAGACTCAG
CCTGGAATTG AATCCTGGCT GTGTGATGTT GGGCCAGTGA CTTAACCTCT CTGTGCTTTT
ATTCACCTCT CTATAAAATG GGGATTATAA TAAACCTACC TTATAAGGTT ATTATAACAG
TCAGTAAATA TAAAAATAGA AGTTTTTGGG TGATGACTAT CACATCAGTA AACACTTGTT
TGCCATTATT TTTATTACTT GACTAAAAAT ATACCAAAA GACCATCCA GAAAACCCCT
TAAGCTGCTA GTGCAGAAAG ATTCCCCCTTG TGTTTGTGTG CTGGGGGGTC AGTGGTGCCT

RR

RR

FIG. 6A(69)



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RR

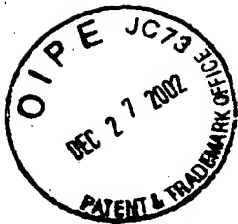
RR

GTGGCCCACT GGAGAGGAGA CAGCTATGGC TGGAGTGATT CTCAAACCTC AGAATGTCTA
AAATCATCAC ATGGACAACCT TATTAAGGAA AGCAAATGCC TGGGCTCCAT CCTCAGAGAG
TCTCATTCAC TGGGTCAGGA TAGAGCCCAG GAATCTTTAC CTAAAGAAC CATCCCACCT
CCCACCTCAT ATGATCCCTTA TGCAGGTGAT CTGGGGCCCA CACTTTGAGA AATAGACTCA
GGTCAAAGTG GCTCTAACTG CATCTCATT CTACCTGGC ATATCTAATA GTAGAGAAGA
AGACAAATGCT AAGATTTTGG TTGGAGATCT TTTGCTGGGA TTGCTGCTTC ATTCATTAC
TCATTTATTT ATTTATTTAT TTATTTTGAA ACAGAGTCTC ACTTTGTCAC CCAGGCTGGA
GGCAGTGGC ACAATCTGAG CTCACTGCAG CCTCAGGCTC CTGGGTCAA TCGATTCTCT
TGCCTCAGCC TCCCGAGTAG CTGGGATTAC AGTCATGCAC CACCACGCCC AACTAATTCT
TGTATTTTGA GTAGTGACAG CGTTTCACCA TGTTAGCTAG ACTGGTCTCG AACTCCTGAC
ATCAGGTAAT CTGCCTGCCT CGGCTCTCTCA AAATTAGTAG CTGCAATTAC ACGTGTGAGC

SS

SS

FIG. 6A(70)



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SS

SS

TGCCGTGCCT GGCCCTGCTGT TTCTTTTAGT TGGGCCCTCTT CTGTAATAGA GTGTGAGAAAT
TCTGACTTGC TGCAACAGTC TGCTTTGAAG CAGGCTGTG TTTACACTGG TCAGATGTGG
AATTGTGGG CACACTTAGC AGCTTCCCTT TCTAATTTT CTGTATTTT AGGAGAACAA
TTTTAAAAA TTTAATAAAA ATGCCCTTAA AATTAACATT ATTATAAGAT GAATCCCAT
TTTCTAATCT TGTAATAATA AACAAATCAT AAGCATATGA GCACCTGCAC TTAGGGAATC
AAGTTGGCA AAGCTAAACA CTCCAGCTC TAGGTGATTC GCGGCAATAC AAATGGAGCT
GGACTTTGGC CACAGTGCAA AAATATTGAT CTGTTGTTAG ATGCTCTGAA GTTTCAGAA
AGAAATTGGT CTGCCCTGCTG TGCTTCAGTG CTTAAGGGA GTGGTTCCTC AAAATGTTAG
TTTTTAAGCC CAGCTTTCTT AAATAGGAAG ATTCTAATAG TAGCAAAAAT ATAAACTGCT
TCTAGGTTA AAAAGGACCC AGCACACAAT GGTATACACA CACCTTCTC CTCAGGTGAT
GAGTGGATGA GTGGCCCTGGT GTATTTCATA ACATCTCCCA GTCCAAATG CTAAAGCAAT

TT

TT

FIG. 6A(71)



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TT
TGCTGAAAAG ATACCATGTG TACCGGAACC TTGCAGAGGT ATTTTGTGG CATAAAAAGA
AATATTGATC ATCTATAGTA AAAATGGTTC TACTTTAATA CTA CTGAGAA AAGATTTTCT
TTTCCCAGAT CTACATCCTG AATCTTCATG AAGACAAGAT CCCCTAAACT TCCACTAACA
CCATAATGTG TGCTGTCCCTT TGTAATGTAG TCCACAGATC TCATAAACTG TCAGAAATAG
CAGAGATTGT AAGTCAATC ACTTCCCCTG TAAGGCCCTG GTCCCTCACT TACATCCCTA
ATAACGTCCT CTAACCTCTG CTGGAGGGCA GATTAGCTG CCAGCTGGGA AGAGCTCTGC
CCTAGTCAAC ATTTTATCT GTGGCTTTCA GATGAGAACA CTGGATGCTT ATCTGAAAAA
AGCTCCTCAG GCTGGAGGA GGGATTGGCT CTAACAAGAT GCAATGTGAT AAGAATAAAA
GCGAAGCCAA ACTCTAGGC CAAAGGCTCT AGCAACACAC TTTTGAGAAC CTGGGAGACG
AGTTTGGCT GATGCGAGCT TCTCCGCCCTG CTAAAGTAGC CCATTCCATT TGGACGGCTC
TAGAGGCTGG CATGTTCTC TCCACGTTGT GTTAATGTAC TCCAGTTTCT TCCTGCCCATG
UU

FIG. 6A(72)



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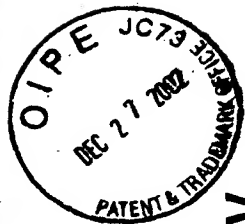
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UU

AACTGGCATG CCTGGCTCC TCCTACCTTC CCCACTTAA GTCTTCCCTC CCTCCTTCTG
ACCTTCCCAT TCCAGCCACA CTGGCCCTTT GTCTGGTCCT AACAAACCAT GCCTTTCCTG
CCTCCAAGCC CTACACCTGC TATCCATCCC TCTGTCTGAG AGACACTCCC ACCCCTTCAC
AAAGCCTGTT TCTCATCCTT CCAGTTCAGA TGTCTTCTCA GCTTGCCCTCA ACTGACCTCT
TTCAGCTATT CTCACCTCTT GTA CTCTGTT CATTTCCCTC CTGGCAGTCA CCATAATTTA
TCTTTATTG AATCAATTTC TTAGTGTAT TATTAGTGA TTGACACT CTGTCTCTCT
GTGCCCTTCT TATTCACCTGC AGGCTTTCTT ATGTAAGTAA TTTATTACT TAAATTTTAA
AAAAATAATT CAACTTTTGG CCGGGCACAG TGGCTCACGC CTGTAATCCC AGCACTTTGG
GAGGCCGAGG TGGGTAGATC AGCTGAGGTC AGGAGTTCGA GACCAGCCTG GCCAACATGG
TGAAATCCCA TCTCTATTTA AAATACAAA ACTAGCCGGG CGTGGTGTA TGCACCTGTA
ATCCCAGCTA CTCGGGAGGT TGAGGGAGGA GAATCACTG AACCGGGAG GTGGAGGTTG

W

FIG. 6A(73)



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W CAGTGAGCTG AGATCACGCC ATTGCACTCC AGCCTGGGC ACGAGAGTGA GACTTCATCT
CAAAAAACA AAAACAAAA AACCCCTGCT TTTACAGAGG GCTGAACTAA TTTACATTCT
CACCAATAGT GTATAAGCAT TCCCCCTTCT CTACAGCCTC ACTAGCATTT ACTTTTTTAA
AAACTTTTT AATAATAGCC ATTCTGACTG GTATGAGATG GTATCTCCTT GTGGTTTTCA
CTTGCAATTC TCTGATGATT AGTGATATTG AGCATTTGTT TAAGTTTGTT GGCTGTTCTG
ATGTCTTCTT TTGAGAAGTG TCCTTTCATA TATCTGCC ATTTTTTGAA TGGAGTTGTT
TTGTGCTTGT TGAATTAAAGT TCCTTATAGA TTCTAGATAT TAGACTTTTG TTGGATGCAT
AGTTTGTA TATTTTCTCC CATCCATAG TTCTGTTTAC TCTGTTGATA GTTCTGTTT
TGTTATGTTT TGTTTTTTTG CTGTACAGAA GCTGTTTAAAT CTAATTGGTC CCACTTGTCA
ATTTTGTGTT TTGTTGCAAT GGCTTTTGAA TTTTAAATAA AAATCTTTC CTAAGGCTGA
TGCCCAGAAC AGCATTTTCT AGGTTTCTT CTAGGATTCT TATAGTTCAA AGTCTTATAT

WW

WW

FIG. 6A(74)



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WW

TTAAGCTTTT AATCCACCTC AAGTTAATT TTATATATAG TGAAATGCAG GGGTCCTGTT
TCATTCTTTT GCATGTGGCC AGCCAGCAAT CCCAGAACCA TTTATTGAAT AAGGAATCTT
TTCCTCATTG CTTATTGT CAACTTTGTC AAAGATCGGA TGACTGTAGG AGTGTGGCTT
TTTCTGGGTT ATCTACTCTG TTACATTGGT CTATGTGTCT GTTTTGTAT CAGTATCATG
CTGTTTTTGT TACTATGGTC TCATAACATA GTTTAAAGTT GGATAATGTT ATGCCCTCTGC
TTTGCTGTTT TTGCTTAAGA TTGCTTTGGC TATTGAGGCT CTTTTTCAC TTCATATGAA
TTTTAGAATA GTTTTTTCTA ATTCTTTGAA AAATGACCCTT GGCAGTTTGA TAGGAATAGC
ATTGAATCTA TAGATTGCTT TGGGCAGTAT GCTATTTTAA TGATATTGAT TCTTCCTATC
CATGAGCATG GAATATTTT CCATTGTGT GTGTCATCTA CTATTTCCTT TAGCAATGTT
TTTTAGTTTT CCTGTAGAG ATCCCTCCTAG GTATTTCATT TTTTATGTGA CTATTTTAAA
TGGGATTGCA TTCTTCATGT GGCTCTCAGC TTGAATGTTA TTGGTGTATA GAAATGCTAC

XX

XX

FIG. 6A(75)



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XX

XX

AGAGTTTGT AACTGATTC TGTATCCCTGA AACCTTACTG AAGTCATTTA TCAGTTCTAG
GAGCCTTTGG CAAAGTCTGT AGTGTTTCT AGGTATAGAA TCATATCATT AGCAAAGAAA
GATAGTTGA CTTCCTCTTT TCCATATTGA ATGCCCTTTTA TTTCTTTCCC TTGCTGATT
GCTCTCCAG TACTACGTTG AATAGGAGTG CTGAGAGTGA GCATCCTGT CTGTGCCAC
CTCTCAGGG AAATGGTCC AGCTTTTGCC CATCAATAT GATGTGGCC ATGGGTTGT
CACAGATGC TCTTATTATT TTGAGGTGTA TTCCCTTTGAT GCCAGTTG TCAAAGGCCT
TTATCATGAA GGGATGTTG ATTTATTGA AAGCTTTTC TGGTCTTAT TTGGTGAATT
GCATTTATTG AATTGTGCAT GTTGAGCCAA ACTTCCATCC CAGGATTAA ACCTACTAA
TCAATGGTGT AACTTTTGA TGTGCTGCTG GATTGGTTT GCTAATTTT TTTTTTTTTT
TAAGATGGAG TCTCGCTCTG TCGCGCAGC TGGAGTGCAG TGGTGTGATC TTGGCTCACT
GCAAGCTCCA CCTCCCGAGT TCATGCCATT CTCCTGCCCTC AGCCTCCCGA GTAGCTGGGA

YY

YY

FIG. 6A(76)



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YY

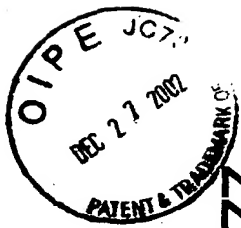
CTACAGGCAC CCGCTACCAT ACCCAGCTAA TTTTGTATT TTTTAGTAGA GACAGGATTT
CACCATGTTA GCCAGGATGG TCTTGATCTC CTGACCTCGT GATCTGCCCTG CCTCAGCCTC
CCAAAGTGGC TAGTATTTTT TTAATTACTA TTTTTTCTCA CCTTGCTGC CATCTTATGA
TTTTCTAGTA TTTTGTGAA GATTTTGCA TCTATTTTCA TCAGGGATAT TGGCCTGTAA
TTTTCTTTTT TCATTTCATC TTTACCACAT TTTTGTATCA GGTTCATACT GGCTTCATAG
AATGAGTTCA GGAATGGTCC CTCCCTCCTCG AATTTCTCT GTAGAATTAG TACCAGCTCT
TTGTGTGTCT GGGAGAAGTT GTATGCCAAT AATTAAATG CAGTTAATAT TTACTGGACA
ATTTCCTCCA GATAATTGTA TATGATTTTT GTCCACCCT GAGTTGATAC ATGTATTTTA
ATTGTATCAT GGTATGAAA GAGCAAGAGT TATTGGTCA CCTAGTCTTG CCTATAGATG
TTGCCTAATG ATTCAAAGTA GATATTTGG GAGCCTAAC AGGTGCCGTG GACTAGGCAG
TTTTGTTTTT TTTTTTTTTT GAGGGACAGA GTCTCGTTAT GCTGCCAGG GCTGGAGTGC

ZZ

YY

ZZ

FIG. 6A(77)



ZZ

AGGGCATGA TGTAGGATCA ATGCAACATC CGCCTCGTGG GTTCAGAGCA ATTATACTGC
ATCAGCCTCC CCAGTAGCTG GGA CTACAGG CACGCTGGC TAAATTTTGT
ATTTTAGTA GAGATGGGGT TTCACCATAT TGGCCAGGCT GGTGTTGAAC TCGTGGCCCTC
ATGATCCACC CGCCTCGGCT CCCAATGTGC TGGGCTTACA GGCGTGAGCC ACCGCACCCG
GAGATTAGC AATTTTATAT TCCCAAATAT CCAACTCTC TGACCCGCTT TCTCAGCCTG
GGTGTATCAG GCACAAGGCC TGTTCAGATT ATGTGGTCTC TGAAGATATG GCTCTCCAGG
GTTGACAATG TGGATAAGGA TTCACCTGGT TTAGGATTTA CACATTGCGC TTGAATGTCT
GTTGCACCAA GTAGACAGTC CATCCCACT TGGCCATTG GTCAGAGCTG TAAGGAGACA
AGGAGGTGG CAGCCGCTGC TGTGAACTGC TTGGACAAAG ACTGCCAAAT AGCTATCAGA
CAGTGTAAAC AACAGCTGAT TTAGGTTTGA AGGGGCGAGT CTC TTGGCC ACTTACTATG
CTGCATCATC CTC TTTGGAA AATGCTCTTC AGTAACTGC CTAACAGACT GAGAAAATAA

AA'

AA'

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FIG. 6A(78)

AA' _____ AA'

AATGCTCACA GAGAAAAAG ACCCGGAAAG TCTGACTTCT CAGAGCTCAG TGTTTAGGTG
CAGAACTGGA TTGTGAAAGG ATTTTAAAT TTTTATATAT CATTGCAGGG AACATTCATT
TATTCCATCC TTCTCCACTC CCACCTGTCT GTCGTGTCT TGTCTCTGT CTCCCCACCT
CTCTCTCTAG ACACACACAC GCACACACAC ACACACACAC ACACACACAC ACACACACAC
ACACACACAC ACACACACAC ACACACACAC CCCTATTCAT TGCCAACAGT AATAGAGTTG
CTTCTTTACT TCTTGGAGAG AAAAGCCTCA ATCTGAGGAA GCTGTGCTGA CTAGCCTTGC
TCTTAATCAT GGAGACAATG CTTTATGCCT TTATCTTTGC ACAGCTGAAA GCCATGGCAG
AAGCAGTCCT CTAAACGAAA TAAATAGAA AGGTTCTCTG TAAGCCCTGG CAAATGCAGC
CTTCTATCCC TCCCCCAACA CTCACAGCTT CTGAGCAAGA TGTGTCTGCC TTCCAGGAGC
TGGGTGATGG GCAATAATGA GCAGAGCCAC GTGAAGGAAA GATGGGTGAA GAAATGTGTG
TGGAGTCATG CTGGCTGCAC TGACCATGAA ACAAGGATC TACCCCTCTA GTAAC TGCCC

BB' _____ BB'

FIG. 6A(79)



BB'

BB

TACTCCTTTG GTAACGTGTC TGAAATTATA ACTTGCCAGA AGTTCAGAAAG GACCTAGTGC
AGGTATTAGA GGAAATTTCGT AAGATTGAGC CATTTATTCC TGCACAGATA CATAATAATG
GACACGGGCC ATGGTGGCCA GCATTCTTGC TCTTGACAAT GGTGAAGGGA AGGGTTGTAG
GTCATGGCTA TGCTCTCAGA ATTATAATGG AAAGAAACAG CTCCTGAGTG TTTACTATGA
GCCAAGGGCT GTGCTAAACA CTTTACCATA TGATGACATC TTTTCTCTCAC AGGTATCAAA
AAACAATAGG ACATACCGGA TAGCTACAAT CTTTGGGGCC CTGCAAAACAC AATAATGTGT
ATTCTCTTCT TCAAATCCTA CATATTGCTA CAAACTGTAT CCTGAGGCA TATTCATTGT
AAAATAAAAA CATATAAAGT ACTACTTTTG TTTTGTGAGA TGGAGTCTCG CTCTGTCACC
CAGACTGGAG TGCAATAGCA TGATCGTGGC TCACTGCAAC CCCCTGCTCC TGGGCTCAAG
TGATTCTCCT GACTCAGCCT CTCAAGTAGC TGGGATTACA GCGCACGCC CCCATGCCCTG
GCTAATTTT GTACTTTTAA TAGAGACCAG GTTTCACCAT GTTGGCCAGG CTGGTCTCAA

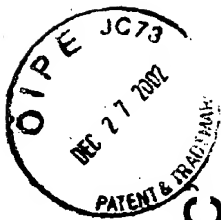
CC'

CC'

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FIG. 6A(80)



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CC' _____ CC'
ACTCCTGACC TCAAGTGATC CACCTGCCTC GGCCTTCCAA AGTGCTGGCA TTACAGCTGT
GAGCCACTGC ACCCGGCCCA TATAAGTAC TACTAATGTA ACAGGGTGCT AGTCCAGACA
GTGACCACAC GTGGTGTTCA TTGAAGGCTG GACTAACAAAC TCCAGCCTCT CCGCCATCAC
AGAGTGATGA CTGCCTTCCC TGAAGCAAAG CTTCCTGGTTC AAGGAAAGGC CAGTAAAGTA
CTGCTCTTTG TTGTATACAT GTTAGATGAT CAGGCCTCAA GAAAAGTATA AAGAGATCTT
TGTGCTCTCT GGGACTCAAA AAGCTGCACT CTTTGGGGGA AGGATAGCCA GGTAAAAGTG
GCCCAGGTAA AGAGGGCCTG GTACACCCTGG TTCTGCAAGA TGGTAGACAC AAAAATGAGA
GCTACATTG GAGCTTATGT GCCCCTAACT CTGTACATAA CCTGCAAGAT CTAATTACTA
ACAACTGGAA TCTTGGAAC ACCTGTAGTA CATCCTTGGC TAAGGTTAGC CCCAACAGAG
AGGGCTCTCC TCTTACAGAG AACCATTAACA TTTGTGCCTT CATCCTAGAG TAGAAAAGGC
ATGATCAGAC TACTAAAAAG ACATCAGGAA AGGGCCTGTG ACATCTGAGG GAAAGTGGTG
DD' _____ DD'

FIG. 6A(81)



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DD' DD'

CCCTCTCTGG GATGTTGGTT CGGGAAGAGG GCATGGAGG AGTGCCCTGCT TTAGATGGTC
ATTCAGGAAC CCAGGCTGAT AGTGAGAGGT GAAGCCAGTT GGGCTTCTGG GCTAGGGGGG
ACTTGAGAA CTTTGTGTC TAGCTAAAGG ATTGTAAATG CACCAATCAG CACTCTGTAA
AATGGACCA TCAGCAGGAT GTGGGCAGGG CCAATAAGG GAATAAAGC TGGCCACCAG
AGCCAGCAGT GGCAAACTGC TCAGGTCCCC TTCCACGCTG TGGAAAGCTT GTTCTTTTGC
TCTTCACAAAT AAATCTTGCT GCTGCTCACT CTTTGGGTCT GCACTATCTT TATGAGCTGT
AACACTCACC GTGAGGGTCT GTGGCTTCAT TCCTGAAGTC AGTGAGACCA CAAACCCACT
GGGAGGAACA AACAACTCTG GACACGCCAA CTTTAAGAGC TGTAACATTC ACTGCCAAGG
TCTGCCGGCTT CACCTCTGAA GTCAGCGAGA CTATGAACCC ACTGGAAGGA AGAAACTCCA
GACACATCTG AACATCTGAA GGAAGAAACT CCAGACACAC CATCTTTAAG AGCTGTAACA
CTCACTGCAA GGGTCTGCGG CTTTCATTCTT GAAGTCAGCA AGACCAAGAA CCCACTGGAA

EE' EE'

FIG. 6A(82)



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EE' _____ EE'
GGAACAATT CCGGACACAT TTTGGTGACC CAGATGGGAC TATCACCAAG TGGTGAGTAC
CATCAACCCC TTTCACCTGT TATTCTGTCC TATTTTCCCT TAGAATTCGG GGGCTAAATA
TTGGGCACCT GTCAGCCAGT TAAAAGCGAC TAGCATGGCT GCCAGACTTA AGAAACTAAA
GACACGGGTG TCAGACTTTC TGGGAAAGGG CTCTCTAATA ACCCCCAACT CTTTGGAGTT
GGGAGCGGTG GTTTGCCCTGG AACCAGCTTC CACATTTCCT GTACTTCTGG GCTGAGACGA
GGGTCAACAT AGAGGAAAGC CATTCAAGCTC TGGGGTCCCG ACAGCAAGTT GGTGAGCCCT
GTGGCCATGA TCACAACTCT CGAAGTCATG TTGCCCCAAGC GAGACTCACC CATCTATCCT
ATCTATCCTG ACTCTTGCTT CCTGGGTCCT AATGCCCTGGA AGACAAAACCT TCCCTCTTGT
TCTGTTCTCC AAGGCTAGTC CCACTTCTAA AAACCACTCC CTGTCTCTGG TGCTTTTCTA
GTTTCTCCCTA TAAGAAATGAT TTCTAGTATA AACTCCAGGA CTCTATTCTC TTCTTTAGGC
ACCCGGGCTC ACCAATCAGA AAGCCATAAT TTTTGCCCAA AGCCCATCT TAGGGGGAC
FF' _____ FF'

FIG. 6A(83)



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FF'

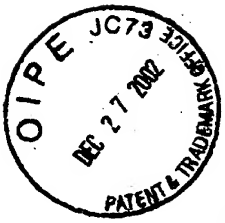
FF'

TATCTGGAAT TTTAGGATCC CTCCTCAGAC AAGCAGGCCT AACAAAAGCT ATTCCCTGAAG
CTAGGATATG GGGAGCCTCA GAAATGATAT CCTTCCTATT CAAGTGAGGA CAAAAGGCAT
CACTCTTCCA ATTCTGGAGA TCCCTTCCCT CCTCAGGGT ATGGCCCCCTCC ACTTCACTTT
TGGGGCATAA CGTCTTTATA GGACACGGGT AAAGTCCCAA TACTAACAGG AGAATGTTTA
GGACTCTAAC AGGTTTTCAG GAATGTGTCG GTAAGGGCCA CTAAATCCGA TTTTCTCTCGG
TCCCTCTTGT GGTCTAGGAG GACAGGTAAG GGTGCAGGTT TTCAATAATG TGTGTGTAAG
GGCCACTAAA TCTGACATTC CTGTGTCCTC CTGTGGTCT AGGAGGAAAA CTAGTGTTC
TGCTGCTGCA TCAGTGAGCG CAACTATTCC AATCAACAGG GTCCAGGGAC CATGTGGGT
TCTTGGGCAA GAGGTGTTTC TGCTGCTGCA TTGGTGGGCT CAACTATTCC AATCAGCAGG
GTCCAGTGAC CTTTGCGGGT TCTTGGGTCG GGGGTGGGG GGAACAAACA GACCAAACT
GGGGGCAGTT TTGTCTTTCA GATGGGAAAC ACTCAGGCAC CAACAGGCTC ACCCTTGAAA

GG'

GG'

FIG. 6A(84)



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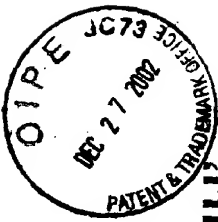
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GG' GG'

TGTAATCCTAA GCCATTGGGA CTAATTGAC CCGCAAACCC TGAATAAGAG TGGCTCATTT
TATTCTGCAC TATGGCCTGG TCCCAATATT CTCTCTCTGA TGGGAAAAA TGGCCACCTG
AAGGAAGTAT AAATTACAAT ACTATCCTGC AGCTTGACCT TTTCTGTAAG AAGGAAAGCA
AATGGAGTGA AATACCTTAT GTCCAAACTT TCTTTTCATT AAAGGAAAAT CCACAACTAT
GCAAAACTTA CAATTCACAT CCCACAAGAA GAACTCTCAC TTACCCCCCAT ATCCTAGCTT
CCCTATAGCT CCCCTTCCTA TTAATGATAA GCCTCCTCTA TCTCCCCCACC CAGAAGGAAA
CAAGCAAAGA AATCTCCAAA GGACCACAAA AACCCCTGGG CTATCGGTTA TGTCCCCCTC
AAGCTGTAGC GGGGAGGGG AATTGGCCC AACCCAGGTA CATGTCCCCCT TCTCCCCCTC
TGATTTAAAG CAGATCAAGG CAGACCAGGG GAAGCTTTCA GATGATCCTG ATAGGTATAC
AGATGTCCCTA CAGGTCTAG GGCAAAACCTT CAATCTCACT TGGAGAGATG TCATGCTATT
GTTAGATCAA ACCCTGGCCT TTAATTTAAA GAATGTGGCT TTAGCCACAG CCCGAGAGTT

HH' HH'

FIG. 6A(85)



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HH'

HH'

TGGAGATACC TGGTATCTTA GTCAAGTAAA TGATAGAATG ACAGCTGGGG AAAGGACAA
AGTCTCTCCC GGTCAGCAAG CCATCCCCTAG TGTGGATCCC CACTGGGACC TAGACTCAGA
TCATTGGGAC TGGAGTCGCA AACATCTGTT GACCTGTGTT CTAGAAAGAC TAAGGAGAAT
TAGGAAAGAG CCTATGAATT ATTCAATGAT GTCCACCCATA ACTCAGGAAA AGGAAGAAAG
TCTTGCCCTTC CTTGAGTGGC TACAGGAGCC TTAAGAAAAT AACTCCCCCT GTCACCCAAC
TCACTCAAGG GTTAATTGAT TCTAAAAGAT ATGTTTATTA CTCAATCAGC TGCAGATATC
AGGAGAAAAGC TCCCAAAAGC AAGCCCTTGG CCCTGAACAA AATTGGAGG CATTATTAAA
CCTGGCAACC TTGGTGTCTT ATAATAGGG CCAAGAGGAG CAGGCCAAAA TGGAAAAGCG
AGATAAGAGA AAGCCACACAG CCTTAGTCAT GGCCCTCAGA CAAACAAACC TTGGTGGTTC
AGAGAGGACA GAAAATGGAG CAGGCCAATC ACCCAGTAGG GCTTGTGTTGTC AGTGTGGTTT
GCAAGGACAG TTTAAAAAAG ATTGTCCCTAT GAGAAACAAG CTGCCCCCTC ACCCATGTCC

II'

II'

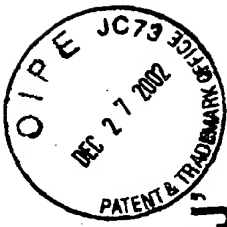
FIG. 6A(86)

II'

ACTATCGCTG AAGCAATCAC TGGAAGCCAC ACTGCCCCAA AGGACAAAGA TTATCTGGGC
CAGAAGCCCC CAAGCAGATG ATCCAACCAC AGGACTGAGG TGCTCAGGGT TAGCGCCAGC
TCATGTCATC ACCTCACTGA GCCCTGGGTA CATTTAACCA TTGAGGGCCA GGAAATTGAC
TTCTACTGGA CACTGGTGCG GCTTCTCTCAG TGTTAACCTC CTGTCCTGGA CAGCTGTCCT
CAAGGTCTGT TACCATCCGA GGAATCCTGG GACAGCCTAT ATCCAGGTAT TTCTCCCACC
TCCTCAGTTG TAACTGGGAG ACTTTGCTAC AGATAGTAAG TATGCTTACC TAATCCTACA
TGCCCCATGCT GCGATATGGA AAGAAAGGGA ATTCTCTAACT TCTGGGTGAA CCCCCATTAA
ATATCACAAAG GAAACTATGG AGTTATTGCA CACAGTGCAA AAACCCAAGG AGGTGGCGGT
CTTACATTGC CGAAGCCATC AAAAGGGGAA GGAGAGGGGA GAACTGCAGC ATAAGTGGCT
GGCAGAGGCA GGGAAAGACA AGCAGAAAGG AAAGAGAGAA AGAGCAGAAA GTGAGAGAGA
AAGAGAGATA GGAAGTGATA GCAAAGAGGG AGTCAGAAAG AAAAGAGAGA GGAGAGAGAG

JJ'

FIG. 6A(87)



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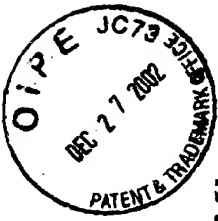
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JJ' _____ JJ'

AGGGGAAAG ACAGAGAGAG ACAGAGGAAG AGACAGAGAG ACAGAAAGAG AGAAGCAAAG
AGAGGAAGAG ACAAAGAAGG AGTCAAAGAG AGGGAAGAG AAGTAGTAAA GAAAAAACAG
TGTAACCCTAT TCCTTTAAAA GCCAGGTAA ATTTAAACC TATAATTGAT AATTGAAGGC
CTTTCTGTT AACCTATAA TACTCCCAAT ACCACCTTGT TGTTCAGTGT TAAACAAGGG
TTATTAGCCC AAAAGCCACT GAGGCCACTG ACAACCCGTA GCCTTCTTAT CCAAAATCCT
TAACACAGCA GGTTCCTAA CAGGGATCTA ATCTTAGGTC GACCAGACTG GAGAACTGCC
TTCAGGACAG GATGATAGAT GGTTCCTCCC AGGTGATTAA GGAAAAAGAC ACAATGGGTA
TTCAGTAAGT GATAAGGAAA CTCTTATAGA AGCAGAGTTA GGAAAAATTGC GAAATAAGTG
GTCTGCTCAA ACGTTGAAGC TGTTTGCTGT TTGCACTCAG CTAACCTTA AAGTACTTAC
AGAATCAGGA AGGAGCCATC TATACCAATT CTAAGTTAAT ATGGACTGAA CGAGGTTTAA
TTAATAGCAA AGAAAATTAA AATCTCAAC TTACGAGGTT TTCAAGTAA GTAAAGTTTG

KK' _____ KK'

FIG. 6A(88)



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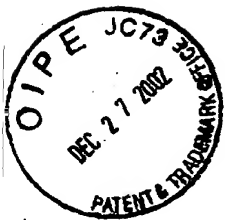
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KK'

GTAAAAGTTA ACAGCGTAAC ATGTATTATC CTAGTACCAC ACATTCTCTC AAAGGATTTG
CTCAGACAGT TTGCAAAAAA GAACGAAATC TGTCTTACT CTACAATCCC AAATAGACTT
TTGGCAGCAG TGACTCTCCA AAACCGCTGA GGCCTAGACT CTCATGTTGA GAAAGGAAGA
TTCCTGCACTT CTTAGGGGTA GAGTGTGTT TTTATACTAA CCAGTCAGGG ATAGTATGAG
ATACCACCCA GTGTTTACAG GAAAAGGCTT CTGAAATCAG ACAATGCCTT TCAAACTCTT
ATACCAACCT CTGGAGTTGG GCGACATGGC TTCTCCCCCTT TCTAGTCCCT GTGACAGCCA
TCTTGCTAAT AGTCGCATTT GGGCCCTGTA TTTTAAACCT CTTGGTCAAA TTTGTTTCCT
CTAGGATCGA GGCCATCAAG CTACAGATGA TCTTACAAAT GTAACCCCAA ATGAGCTCAA
CTAACAACTT CTGCTGAGGA CCCCTGGACC GACCCGCTGG CCTTTTCAAT GGCCTAAAGA
GCTCCCCCTCT GGAGGACACT ACCACTGCAG GGCCCCCTTCT TCACCCCTAT CCAGCAGGAA
GTAGCTACAG CGGTCATCGC CAAATCCCAA CAGCAGCTGG GGTGTCCCTGT TTGGAGGGGG

LL'

FIG. 6A(89)



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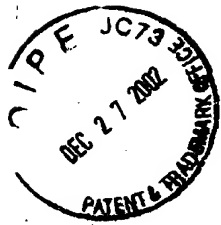
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LL' _____ LL'

GATTGAGAG TGAAGCCAGC TGGGCTTCTG GGTGAGGTGG GGAAGTGGAG AACTTTTGTG
TCTAGCTAAA GGATTGTAAA TGCACCAATC AGCACTCTGT GTCTAGCTAA AGGATTGTAA
ATGCACCAAT CAGCACTCTG TAAAATGGAC CAATCAGCAG GATGTGGGCG GGTCAAATA
AGGGAGTAA AACTGGCCAC CCGAGCCAGC AGTGGCAACC CACTCGGGTC CCCTTCCACA
CTGTGGAAGC TTTGTTCTTT TGCTCTTCAC AATAAATCTT GCTGCTGCTC ATTCTTTGTG
TCCACACTAC CTTTATGAGC TGTAACACTC ACTGCGAGGG TCTGTGGGCTT CATTCCTGAA
GTCAACAGAC CACGAACCCA CTGGAAGGAA CAAAGAACTC CCGATGTGCT GCCTTTAAGA
GCTGTAACAC TCACTGCGAA GCTCTGCAGC TTCACTCCTG AAGTCAGTGA GACCACAAAC
CCACCAGAAG GAAGAACTC TGGACACACC TGAATATCTG AAGGAACAAA CTCCAGACAC
ACCATCTTTC AGAGCTGTAA CACTCACCGC AAGGGTCTGT GGCTTCATTC TTGAAGTCAG
CAAGACCAAG AACCCACCGG AAGGAACAAA TTCCAGACAC AGTAGGAAAT CTGTATTTTT

MM' _____ MM'

FIG. 6A(90)



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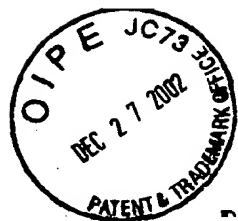
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MM' MM'

GATCTGTGGC TTCCAGGGTT ACTCCAGTCA TTGAAGTCTC CATTGCAGCC TTAAGGAAAC
AGAGAATGGT TTGGAGGAGC ACATGTGGGA ATTGTTATGG ACCAGGCTTG AGATGCACAT
AGGGCATTTC TGATCAAACC TAGCTGGAAG CAGGGCCAGG AAATATAATC TAAGGAAGAC
AGTTTTTGTA GACAGTAGTA GTCTTTGTCAT CTGAGACATG TAGATTATCA AGCAATTAAAT
TAGAAAAAAT ATAGCCAGGT GCGATGGCTC ATGCCCTGTAA TCCCAGCACT TTGGGAGGCC
AAGGGGTGTG GATCACGAGG TCAGGCGTTC GAGACCAGCC TGGCCAACAT GGTGAAACCC
CGTCTCTACT AAAAATACAA AAATTAGCCT GGTGTGGTGG CACGCATCTG TAATCCCAGT
ACTCAGGAGG CTGAGGCAGG GGAATCTCTT GAACTTGGGA GGCAGAGGTT GCAGTGAGCC
AAGATCACAC CACAGCACTC CATCCTGGGT GACAGAGCGA GACTCTGTCT CAAAAA
AAAAAAAAA GGAAAGGAAA ATATAATCAA GAATATTGAC AGGTAACATT TATTCAACAC
TTACTATGCA CCAGGCAATA CACTAAGTGT TTACATGGA TTAACATCATT TAATCTTAAC

NN' NN'

FIG. 6A(91)



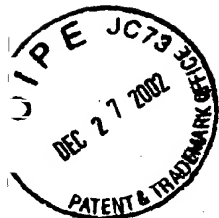
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NN' _____ NN'

AAAGCCCTA TGAAGTCAGT GCTGTTATTA TCTCCACTTT ATAGATAAGG AACTGAAGT
ACAGAAAGGT CAAGTAGAGA AATGGCCATG CTGCACTCT CAGTTTTGA AGCAACTGTT
ACAGGAATCT GGTGTGAGAA ATGCTCTAAC AAGATGTGAG TCAGGGGTTG GGAGGTACTG
AGTCTGAGTT GGCAGTTGG GGATGGAAG ATGGATGAAG AACAGCTTGA CAGAGAAAGCT
GACACTTGGC AACTCTGTGG GACCTTGAAG GGTAGAGGG ACTTCACCAA AGAAACTGGT
GGTCAGGGAT ACGGGAGGGT CACGGCAAG AGGAAAGGA AACTGTACCA CAGCAGAGAG
TCTGAAGCTA CTACAGTGTA GTTCAGCGTA TAAAGAATAA TTATTTTAAG GTAAACTTAT
AACCTCATGC AAATATAAAA TGAACACGTG TCAAAGATCT TATTTAATTT ATTAATTAAT
GAGGGAACCT GTAAGATGTT ACAGCCAGTT CAAAGGATAA TTCAAATAAA TCCATGCACA
TATGTAGGCA ATAAGGAATG CTGAAATGAA TTTAAAAGTA GATGTAAACT GATTATCCA
CAGAGAAATA ATCAGTTGCA TTTCACATAA CAAATTCAG TTGCTTTTCT ACAGAAGGAA
OO' _____ OO'

FIG. 6A(92)



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00' _____ 00'

TTGTTTGCAAT CATTACCAAT TTTTCTACAA CTAACAGAAT TATAAAATAA CTCAAACACA
ATGAAAGGCA GATAAACC ACAATGGTAT GATAGATACA ATATCCACAT CCAGGATGTT
TTTTTCTCAT TTCAAAGTCT TTCACAAGTT TTCTTGATAA GGGAGTGTCATAATACTGT
ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC
ATGTAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA
TGTAAGAAAC ACTTGTTGAG CTTGTTAATA AATCAAAT CCCAGACCCA ACTCCTCAAG
GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAA
CCCAGGTGAT TCTGATAC TTTGAGAAGC ACTGGTGGAA CTAATAGTCA CTGAACGTTT
TTGAGCAGG GAGAAACCTG AGGACGTCTA TGTTCAGCA GTGAAACTT GATTAGAAGT
AGGAGAAGAT GCATGGTCTT AAAAGAATGC AAAATGATGG CTAATATTG AGTGCTTATG
ATGGGCCAGG GGCTGTGCTA GCGCGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA

PP' _____ PP'

FIG. 6A(93)



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PP'

GTCAGTATTA GTGGGGTATC TTAAAGAGTG ACCAGAAATTA AGGGGGGTTT TCACCAAAGC
CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTGTCCT
CCAGGCTGTT CCTGGGCCTC CAGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA
CAACATAAAG CCTGGATTTT GGAACCTCCT GAATGTTACT CAGGCTTTCT AGTAACTGTG
GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG
ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTCATCC ATGAAATGAA
CATTCGGGG AGATCAGTAA GTTGATGTAT CACCCTTGAA CAGGGCAAAA TGAATACTCA
CCAGGAATAT GTGGTATTTT AAAAAGAAGG CAAAGGGAAG AATAGTGGG ATGGGGCAAA
AACTTTAAAT AGATTCCCCC AATCATATAT GGCAATTGAA GATAATTAAA TTATCATTTT
AATTGAGTAA GTACTCATAG AGCCCTCACT ATTTGAAAAT GAACTGCCCTC CTAATTGTTA
TTGTGCAAAT GTGATACATT AAACCTAAGC TATTTTAATA AAACATCCAT TTTCGGGAAGC

QQ'

QQ'

FIG. 6A(94)



QQ

QQ'

TGTAAGTAGG TCTCCAGGT CAGATTGAT AAGCCATAAA GAACAAATGC CAACTCCTAT
TTTTCTATGG TGCTGGGAAA TAAGAGAGAA ATGTGTAATT CAAAGCAATC ATTTAATTTT
ATCCAATAGC TTGATTCTCC TCTCTCTTCT AGCCTTTTAG CTAAGCTGTT ACCAAGTAAC
CACACTAGTT GGCTTGAGTC TTACCACGTGTTCCCTGACC CCACAGTGGA GAGACTGCAT
CTGTAAAGA GCAGTTATGT AACCATGGCT ATGCTGAGCT GGGATTCCCA AGGCTTAGGT
TCTTTCTGTG AATGACCTTC ACCAAGACAC CTGAGGTCTG TGTGGAACCA CAGGCTTGTC
ATCTCTAAGG CAGAGTTGAT AATCCATCT GTTCTCTGAG CCCACACTGA GAAAAGATT
ACATGACTGC AGTTATTGA ATGCCTCATG GAAAGACGTC TTATAAATAT TATAATTAAT
GTTATCATTA AGTAATGCTT CAATGCAGAT CTCCAAGTA TAAATATCAG CTGAGTAAGA
AGTCAATCTT CCCTGAAGCA AAATTGAAAT TTGTAAATGC GATTCTGCGG AGCTTATTTT
GTAATACATG ATTCAGAGT GTCCATAACA CACACAATTG TCTTTTTCCT CCTACATGGG

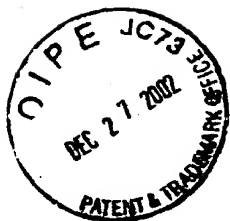
RR'

RR

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FIG. 6A(95)



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RR'

CTATTACAA CAAATGGA CTTATAATGT TTATTCCAG GGATGACTAG AACTTTAATA
ACAAACCTTG GGCCAGGCAT AGTGGCTCAT GCCTATAATC ACAGCACTTC GGGAGGCTGA
GGCTGGTTAG ATTACTTGAG GCCAGGAGTT TGAGAACAGC CTGGCCAACA TGGCAAAACC
CTGTCTCTAC TAAAAATACA AAAATTAGCC GGGTGTGGTG GCGCATGCCA GTAATCCCAG
TTACTAGGTA GGCTGAGGTA CGACAATCGC TGGAACTTGG GAGCGGAGG TTGCAGTGAG
CTGAGATTGC ACTACTGCAC TCCAGCCTGG GTGACAGAGA AAGACTCTGT CTCAAAAAAA
AAAAAAAAT AATAATAATA ATAATAAACC CTGATGAAAG GTTTCTAAAA TGTTTTCATC
TAATGGTTT CTTGACAAAT AAATTTTCTA TATAATGTCA GTTCATAAAA AACTGAGAA
CGACCACATG TCATATCGAC TGCTTAAAG AAAATACGTA TATTACAAA CATATACACA
ATACTGTCTT TTGTCTGGTT AGTTAGAGG TTAGATAAAC TGCAGTATGT TGAGTGGAC
AGATCATAGA ACTAGGAGTC AGGATGTCTG GATTCCTAGG AAGCAATGAA TAGGTTGCAC

SS'

FIG. 6A(96)



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SS'

GGTGCAGCTC AAGTTATTC AAAGTGTGGT GCCAGACCA GCATCATGAG TATCCTCAGG
GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTTGAATCA GAATCCCTAG GTGTGGGGCC
CTGAAATCTG TATTTTAGCA GGCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC
ACTGGGTAGC TGATCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA
TCTCACTGAG TTCAGTTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA TTTCACATGG
ATTGCTTTGA GGATTAGGCA AGAGATCTGT AACAGACACT GTAGAACAGT GTCTCTGTGC
TACAGCTGAC CTTCCATAAA TGGTAGTTGC CTTGATTCTC TGCTCTGCCA CATAATAGCT
GGTTAACTAT GAGCAAGTAA TTTAGTTCTT CTCAGTTTAG TTTCTTCCCC TGTAAAAGAA
GGAATAAAC TGTTATACTC CATTTCTGAA TTGCTATAAA AGTCATTTAA TTATGGGCAT
TGAAGCTCTT TGTTCACCTGT ATAAGGACTG TACATCTAAG GGATTAAATGA GACCAGGCTT
ATGATTTTAA GCATGGAGTA AATAGTAACA CTGACTCTGT TCTATGAACC ACATGGAAAC

TT'

FIG. 6A(97)



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TT'

TT'

TCCTAAAGAAT ATGCACATTT GAAACACAGG TATCATCTGG GGAAGGTGAT CTGCTCACCC
AAACCAGTTC ATGAACATCA ATCTCCAGTG GCGTGCTGGA GCTAGCTGTA CCAGCTCATG
AGGGCCAATT GTTTCATTTT TAGGAATTTT GTTTGCTGGT TAAAAATAGT CATTATTAA
AATTAAATTA TGTAACAAT AATATTAGAT AAAATAAGTT AAAATAAAAA CAAAGGAAC
AATTATCCCC AACTCTTCC CCACCTAATT ATTTACTAT CTGTGCCCTG GGATTATTTA
CATTGATTTT ATCCATATGG TGACAATACT ATTCATATAT AAATGGTGTG CTTCTCTTCA
TAACTCTACA TAGCCTGATG TCAGGCTAGT AGCTTGAAAT TGGCCACAGT GGGAGTGTGA
GCATTGTGAC CATGAGGCTT GGCCAAGGCT ACAAAATCCAG ACTTTTGTTT TTCCCTCCTG
GAGAGCTGTC TGTAAAAAT TTACCAACAC ACCACTGGTC TTACCTTTGT TAATTACCA
CAGTCCAGGT TCTGACCCTAG ACTTAGAAAC CTGGATTGTG CAGCAAGCTG AGGATAGAGC
CATTATTCT AAGAAGGACT CACATTACCC AAGTGCAAG CCTGATATAT ACCTTCAGAA

UU'

UU'

FIG. 6A(98)



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UU' _____

TATCAATTTA TTAATTTACA GTGAAGAAAG CCACCCCAGG GCATTCCCCA GGGGAAGGCA
AAAAGAGCTA GTTGACACATT TTGAATGTTT GATGACATTA GGGTAAGGTG ACACAGAATA
TCCATTCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA
GGACCTTAGA TTGTCACTGT CCATCTTGCT GTAGGACTCT CCTTTCCAGG CATGACGATG
GCCAACTCTG TCCTCCTACC CTA CTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC
TCCAATCAGA GGCTGGTAGC TATTTTAAAT CTTCAGGGCA GTATTTTCA AAGGGAAGTT
CATGGACCAT ATGCATCTGT ATCATTTAGA TGTATATTAA AAATGCTTAG TCTTCCCCAG
TTATACTAGA TCAGAATCTC TGTTGGTGGG GCCCACGAAT CGGTATTTTC AACAAATCAC
TAGGTAATT CTGTATATAC TATAGTGTGA AGACCACTGC TTGAAGGTTT CTTTGCAATAT
CTCCACTAAA TATAAAAAAT ATTGACTTCT AGATTAACT CCCAAAGCAC TTGCATTTTT
AAGTTTCTGG GGCATTATA TTGTGGTACC CCTATACCAC TCACACTCTA GTCAGGAGGT

W' _____

FIG. 6A(99)



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WW' _____ WW'

ATATTATGGA CTGAATGTTT GTGTCCCTCC AAAACTCATA TGTGAAGTC TTAGCTTCCA
ATGTGATAGT ATTAGGAGAT GGTGCCCTTCT GGAGGTAAAA TCAAGCCCTC ATGAATGGGA
TTAGTGCCCTT TAGAAAGAGA GTCGTCAC TCTTTTCCAT CAATTGAAGA TGCAGTGAGA
AGCTGGTAGT CTTGCATCTG GAAGAGGGCC CTCACACAAC CTGATCATGC TGGCACCTGG
TCTCAGACTT TCTGCCCTCCA GAACTATGAG ATGATAAATT TCTGTGTGTTT ATACCCACC
CAGGCTACAA TATTAGGTTG CTGCAAAGTA TTTGTGATTT TTGCCCTTTTAC TTTTTCAGGC
AAAAACTGCA ATTACTTTTG TGCCAAACCTA ATATTTTGTT ATAGCAGCCC GAACTAAGGC
AAGGGAGACT ACATCAGACA GTGTAGCTAT GTAAGTACAA ATGTATCCCT GTTGAAGGAA
AACTAAGTTC TAACCCCTGAC TTCAGGCCAG TAGCCACCTT TTCAATCTCT TTCATGAAGG
GACCATATC ATTATCACTG GTGGCAAAA TAGAGCACGA GAATGGAATT TGCTTTTCTG
TGAAATCTCA GTGTATACAG ATGAAGAGCA AGGTTTGCT TTCATCTCTA AGAAGCAAAA

WW' _____ WW'

FIG. 6A(100)



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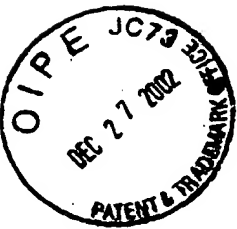
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WW' _____ WW'

GTGAGTACGG ACTGGCACAT TATCAGAGAA AGAATCATTC TAGTCGGTG GGTCTTAACC
AGGAGTGAAT TTGACTCCAG GGAACAGTTG GCAATGTCTG GAGACGTTT TATTGTGTTAT
AGCTGGGGA TGAGTGGTG GGTGCTACT GGCATCTAGT GGGTGGAGAC CAGAGATGCT
GTTAAACATC CCGCAAAGCA CAGGACAGTC CCCGACAACA AAGAAATTATC TGGCCCCAAA
TATCAATAGT GCCAAAGTTG AGAAACCTCA TTCTAGCTTC CTTTCCCCTT CTACGTTCTA
ATCAACTGTT GTTCTTTCAG CATTAGGATT CATCCAGCAG TCTCTTTCCC CAGCAATTG
TTGAAATTTT TTTAAAAATG GACTCATTTT AGTGTACAA GAAAAAATA CATTACACAG
AAAGGATGGG TCATTTTGTT TAATGATGTT TTGCCTTTCA CATAGCAAAA GCTTAATAAA
GTATTTTAA ATAAAATGGT GAATAGATCA AAACATTAAAT TTCACATGTG TTTTAATAAA
TAACAGGAAG ATGGCTATAT TATATAAATT GTTCTTGAT ATGTCTTGAG TGGATCATCA
AACACAAACG TATCTACATG CCTTTTCTTG TGAATAGATC TAATAATAAC GCTCTTCTAA

XX' _____ XX'

FIG. 6A(101)



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XX'

AAACAAATTA AATGGATATT ATTTGCTGAG AATGTAATGC TTGTGTGAAT AGAAGCCAGC
CCTGAATCCA AGCCCCCAGA TCTATTTAAA GAATTGAAG AATGTCAGAA AAGCACGTGG
CTTCAAGGTT AATGTGTAAG ACTCACAGAA ACTTGAAAAA TCACTATGAC TAAAAAGAAA
GTATGAGCTC CCTGCATGCC TGTAATTTGG AATGACAGCC AAAACCAGTT AATTATATAAA
ACAGCTAATT TAACAGGTTT TCAAATTTGT TTCTTTCTCC AAGTAGCATA TAGTCAATAA
TCCTTAAAGA GAAAGCAAAG AAGGGAAGC ACTGAACCAA ATTTGCTTTT TTGTACCTGC
TCAGCTCAA TGCAGAGTTC TCTACCTGGA AATTGACTGC TTCCATAGTT TGATAGCCAC
AGAGAGATGG GAACAGAAGG AGAGGTATAA TCCCAGACTT GATTCAGCTA TAGAGAATGA
CAATAGTGC AGAGGCCTTC CAACCAGAGC GACTCCATCT TGAATACGGG CTGGGTAAAA
CAGGGCTGAG ACCTACTGGG CTGCATTCCC AGGAGGCTAA GCATTCTAAG TCACAGGATG
AGACAGGAGG TCAGCACAAG ACCTTGCTGA TAAACAGGT TGTAATAAAG AAGCCAGCCA

YY'

FIG. 6A(102)



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YY' _____ YY'
AAACCCACCA AAACCAAGAT GGCCATGAGA GTTATCTGTG GTTGGTCTCA CTGCTCATTTG
TATGCTAATT ATAATGTATT AGCATGTATA AAGACACTCC CACCAGTGCT ATGACAGTTT
ACAGGTACAT TGGCAACTTC CGGAAGTTAC CCTCTATGGT CTAAAAAGGG GAGGAACCCCT
CACCTCCCAG AATTGCCAC CCCTTTCCTG GAAAACTTGT GAATAATTCA CCCTTGTTCA
GCATATAATC AAGAAGTAAC TGTAAGTATC CTTAGGCCAG AAGCTCAGGC CACTGCTCTG
AATGTGGAAT AGCCATTCTT TTATCCTTTA CTTTCTTAAT AAACCTTGCTT TCACTTTACT
GTATGGACCC CTGTGAATTC TTTCTTGCAA GAGATCCAAA AACTCTCTCT TGGGGTCTGG
ATCAGGACCT CTTCCCAGTA ACAATAGTAG TAAGGGGTCG GGGAAACTGG ACAAAGGAGT
TTAAGAAGCC TTAGATAAAG GGTCTCATC ATTGTCATAA CATAAAATCA TGGACTCCTA
GAATTTTATA GCTGATAGGA TTAGAAATTT CAAAATTCAA TTTCATTAAT TTTTCATCTGC
GAAAACAGAT GGCCAGAGAG GCCAAACAAT TTGTTAAGGA GCACTGAGGC GATGGAACAC
ZZ' _____ ZZ'

FIG. 6A(103)



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ZZ' _____ ZZ'

CACACTGGAC CGCAAACCTC CTAGCAGAGT ATACAAGGCC TTTGATCTCC TCAGTCAGAA
TGAAC TAGAG CTTTCCAGGG GTACCCCTTC TGA CTGTTA GCATGTTGC CAGTCTGACT
AATTTGAAG TTGCTTAAAT ATCTGTCATT TCCACTGTAT CATAATCTCC TCATTTCATCT
TCAATCTCCA ATGCCCTTGAA CTCAGTAAAT GTAGTTGAA CAAAGTAAA TTGAACCCAG
AATTTCTGAT CATAATCTGG AGCACTTTAA AATTGTCAGC TTA CTGGGA ACGGGATAAC
ATGTGATTG TCTTTGATT TTTTTTTCTC ATATGCTTTT TCCACCTATA GATGCTACAC
GAATGTTTT AAAATCTGAT ATAAAAATTA AAATTA AAAA ATTA AAAA GAAATTTGA
TACAATGCTA CATTAGAGT GTTGATTA GATTCCTTAA GTGTATCATG GTGATCTCTA
CATCACGTGG TGATCAAAT GCTTTGGGT TTAACACATA ACTGACAAAG GCTTGGGAC
ATGTAAGATC CCAAATACAT TTTTATTGAT TTTTTTTTCT TGTGTCTCT CTTTAAATA
ACTTTTTTT GTTATAAGAA TAATTCATGT TCAGTGGAGA AACCATAGAA AATAGTACA

AAA

AAA

FIG. 6A(104)



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AAA

AAA

AGTGAAGGAA TAAATTAA ATGACCCATA ATTGTACCAT ACATTCTGAT TTTTAAACG
CTGAACAAAT TAGCCTTGGG TAAGTACCAG GAATAGAGTG CAGCATTGAA AGTTAAAGTT
TGGGGAAGGA TAGCTGACTT AAGAAATTAT CTAGTTAGAC ATTTTGTGA TGGGGTAATT
TTGCAGATGA CATTAGTGAG AGAAAGGACT TGCCACTCTC ACACAGCTAG TAGGGGTGTG
GGAGGATATT GGAACCAAGT TTCAAGTCTT CAGTGAAGAA TCAAGGGAGA AGTTCTAAAA
CCTAACAAATA TCCCTCTGGA TGGACATTTA TTTTATTACT ACAATAAGCC ACACGGTGAG
TCATAAGGAG CATTTCATTC TTCTAATATG TCTCTACTGT ATTTAGAATC TGATAAAGCC
CTATTAGAAT TCATCTCTTT AAGAATAAAA GAAGCTGAGG AACTAAAGAG AGGGTTGGAA
TAATCCACTA ATTATATCCG TTAAGCTTCA GTTACGCTAA TAAGGAATAT CACATGACTG
TGGTGTGTGC TTGTTCTGAA CAGTAAAGTA CATGAGGAAA GATAAGATTC AGGCTGAAA
TGTCCTTCAG CATATGTAGG TAGTGGTGAT GAAAGTCATT AAAAGAAAAA TTGATTGAGG

BBB

BBB

FIG. 6A(105)



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BBB

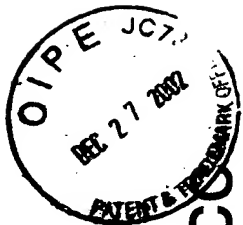
BBB

TATTTTAGTA AACAAAAGAA CTCACCACTT ACCCATCAGG AAGTGTATTG TTAATGCAGT
GCTGTTCAGC CTTCTGGAAG AAAAGGTTTC TTCAATGCTTC TCTCTTTAGC CTAATTCTTA
TCCTGTCACT TTTCAGGCAA AATTAAAAA AAAAAAAGAT TGAAAAACGAT GCTCCTATT
TATTGCTTC AAAAGAAACA GGCTGTTGCA TTGTGCTTGG AACAGTTTAC TCTTGGCCTT
GATGTAAGTG TGAAGGAAG CCCATGTAAT TGA CTAGCA GTATCTGAAG AAGCAGGAAA
TACAGTGTTA AGAAAATGAA CAGGCATGAA AACCATGGCT ATTTGATAAA AGTAAATAAT
TTCTGCAGTT CACATGTTCT CAGCATATTT TCTTTGATAC TGACTTGCTT AATATGACAA
TAGCAGAACC ATGGTAGCTT GTAGGCATTA CTTTCTTTT AATTCTTTT ACATTTTGAA
TTTACCAGCA CTCACATTTG TATTACTTTT GGGTTATACT GAGGATCTAT AACTTATAGA
TCAAATACCT GACATATATA TGCATTCTCT GAAGTCTTAG GGCAGAACTA GAACATTCTT
GTGAACATCA GTATAAGATA TTAAAATGGA AGTTTTCCT AAGACTGAAG ACAATAAAA

CCC

CCC

FIG. 6A(106)



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CCC

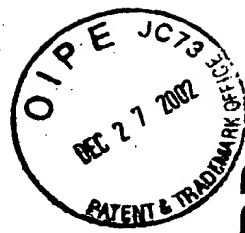
CCC

TATCATAGTC TGAAATGAAT GCCAGCACAC CATACAGGAT TTAAATATCT ATACATATAT
ATGTGTGTGT ATTATATATA TTTAATATAT ATCTGTGTGG GATAGGAAGA GGTAGGGGGA
AATCAGTTT ACAATTATTA AGTATTTTAC CTTGACAAG AGTATATATA TTGGAATCA
GTTGGAGAGT ATTTCAAAG ATAAATGTTA GTGTGCTATG AATGAATCCA CCCCTACCAC
CACTGAGGCA GGTAGGAGA GGCCGTGTGCT CCTCAAGCAT AGTTGAAAA GGACCTCAAC
AAGACCACTT CAAGAGTCTA ATGTGTGGAG ACTGTTGCTT AGGAGACCT TATGGTCTAG
CTTCTGACTC ACAGCTAAGT CAGGGAGACA GGTGGGCTGC TCTGATCGTG GAGTCCAAAA
GATGGCCTGC ACTGAAAAGC CTCATGAGTG TTGACTTAGG GCTAGTCTAA GAGGTCCCCTG
GAAGAAGAAA CACTCAGTAG GAGAGAAGCT GGAGGTACCT TCAGTGCTGA ATTGAACTA
GATTCATTCC CCCGTGGAGC AAATTACATA GGAAAGATGC CCAGTGATGG AGAGTGGGGG
TGTCTCTAAC AATTACCCAC CCACTGCCCC CACCCTAAGA AAAAGAAAAT CACATACAAC

DDD

DDD

FIG. 6A(107)



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DDD DDD

CAGTCAGCTG TAAACATATG CCGAGCCTAG TAAACTCAGA TACTAAGTTA CCAGGTACC
TGGCAAGTAA GAACATTCTT GATTCCCTTC CTCTCTTCTC TTGCCCCTCC AACCTTAGTG
GCTAGCAAGA TGGGGAGAGG AGGAGAAGCT GTAAGTGGGG AAAAAGAGC AGCTTTCTCT
CCTTTTCAGC TGCTGGATTC TCCCTCATCA TAGGCCTGAG CTGGGGAATC AGGAAGAAGG
ATTCTTTTAA AACTGGAAGT AACGTTATCA TTTAATTTTA AAACATTTTA AATTTTGACA
ATGTTGAGAT TAGATATACT AATTATTAAA CTAAGATTAT GTTTTGCAGC TTGAAGTGAT
AAGAAAAACT CTTATCTAAG AGCATCCAGG AAAGTCGGGG GTTTCCCTGAA CATCCTTTAA
AATCCTTTGG AAGTCAGCTT TCAGAGAGGA TTTAAAGTGT AGACTGGGCC TTCAGAAACT
TGGTTAATGT AGGGGTTTCC TATGCAGACT TGGGGAATAT ACCTTGTGTG GAAGAGAGAA
AATAAGATTA TCTTACATTT TTCCCATTC TTTTCAAAA AGAAAGCTCA GCTAGCATGA
AAGTTAAATT CAAAACGTAA TGGGTATTAT TTGCATATTC AAATCTAGTG CATATCATGT

EEE EEE

FIG. 6A(108)



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EEE

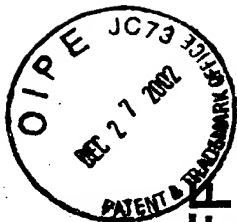
EEE

AAGTACTGAA TTATGGTATT CATTATTCA AATGACAAGC TGGATTTTTT TTTCCTTCGA
ATTTCACAAA TTAATTTTCC TTGGAACCTT TTGGTTTGGG CTTTAAGAGT TTAGGCTTTC
ATCACAAAGA GAGGACAGCC TTGAAGATTA AAGTGTGTGG CTCTTCTCAA GATGTTCTTA
GTCCAGCAAA GGATTCATG CATATTGGG CTTCCTTCTG TCTCATAACC TGTATTTCTT
GATATTCTAT TTATATTCTG TAAGATTTT TTTTAAAGG AAAAATTTCTT CCATGGTTGA
AGGACATGTC AAAAATAGAG GATACAGTTT TATATCAAAG GAAGTTTCAT GATATGACTG
TAGAAGCTCA TTTGACTTAA GACACATCAT TTCCCTCATGG AAGTGTTAAA CAGATCTGTA
CAATAAGGTT GGCAATCTTT GTGTAAAACA GTTTTTTTC TCCTGCTCTA AAGAAAAGTGT
ATATTTCAA ATGTGAATGT CAGCAGTCAG AAAATAGTAT TTTTTTAACT TCGTTTTTCAA
AGTCCTCAA AACCTGTACC TAATCATGAA TTTTTTTTCC CACAGATTGT TTCTTCTTCT
CCCTCCCAGA AACTTTGAAG TTTTCTTACA TGACACCAGG ACCATGTCT TTTTTTAATT

FFF

FFF

FIG. 6A(109)



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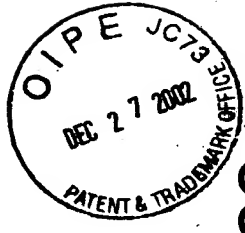
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FFF FFF

ACACAGAAAT GAAAGAAAAA AAGTGTGTTG TATCGTTAAC CAAATATATG AAATCTTTAA
GCTGTATTTT TATTTTAAAC TTTGTTTTGC AAAGAGGCCA TTCCCTTTGG TTAAATAAAT
TGTTATTCAC AGTTTCCTTG TCCTCATATT ATCAAGGGA AAATGTAGA AATTTAAAG
GAAGCTCTAG GCAATGTTTT CATCCCTGAA TCTTTGGAGA GTTATAAAAA CAAACAGATT
ACTGAACCTG TAAGAGAACC AATCGTGAAG TCATTACATC TAAGCATAAG CAAAATCTCC
TCTTGGATCA TTAAGTTATA GAAGAAAAGA AAGCCTGCAC TTTGAAATTT AGATAAAGCT
TGGTAACTTG TAAGTCAAAC ACGTAAATTT TTACAATTCA GGAATATCGA TAGCAGTTGA
GTTTAATAGA CTTCTCACAT TCCAATTTA AAGCTTCCTT CTCGTGCTA ATAGAGATAC
AATAGCAGTA GCGGTTTAAG AAGAAATGAAT CAACAATTTA AAACATAAAT GTGTTTTTTA
TTCATCTCCC TTATTCACAT ATATTTGTTT TGTTTTGAGA AGGAGTTCTG CTCGTGCGCC
CAGGCAGGAG TGCTGTGGCA CGATCTCAGC TCACCGCAAC CTCGTCCCTCC CGGGTTCAAG

GGG GGG

FIG. 6A(110)



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GGG _____ GGG

CGATTCTCTT GCCTCAGCCT CCTGAGTAGC TCGGATTACA GCGGTGCGCC AGCAACCCCG
GCTAATTTT GTATTTTAG TAGAGACAGG GTTTCACCAC GTTGACATC TTGGTCTCGA
ACCCCTGATC TCAAGTGATC AGCCCGCCTC GGCTCCCAA AGTGCTGGGA TTACAGGCGT
GAGCCATCAC TTCTGGCCCT TATTCGCATA CAATTAAAA ATCATCACAG AAGTTTGAA
AGAAGGAGG GGCAGAAAAT TACCTACTTT TCCTCTCCCC AGCGATCTCC TTCAAATCTG
TGCCTTTTCC TCAGGCCCCAG GCCTCAATT ACTGAGCAGT CACACCTCAC AGAGGGAGGT
CTGGGCAATC CACTCTTGGT CACAGGAAAG CCATTGACCC TCCCACCTCC TCTCCTCCAC
CTTGTTCTCA ACTCTTGA CT TGCGCTTTG TTTCTGTTCA AGTCCTAGAA CTGGTTTCTT
TTATCAGGTT AAGTGATTAG TTCTCTTTCC CTCTAGTTGC TCTCACTCCC TGACTCTTGC
CTTCTGTAC AACTGGAGAC AACTCTTTCA AAACCAGCTC CAAGCCCCAG ACTTCTCTCT
GGGCTTAGT TCGTAAGCA GTGCCCTAC TGAGTGAGCC TAGATCAGAC AGAAACATAG

HHH

HHH

FIG. 6A(111)



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HHH

HHH

CTGTTGGCAA GGATTTAGGT GAATTTCCTT CCATTGTTTT TCTAATACCT TTTTTTTTTT
TTTGTAATA TAACCATGCA CCTACACACA TATTGAATA TCCTGCCCTT TTATTAAAA
TGACATGATA GGTCGGGAG TGTGGCTCA TGCCTGTAAT CCCAGCACTT TGGAGGCGG
AGGTGGCAG ATCACCTGAG GTCAGGAGT CGAGACCAGC CTGGCCAACA TGGTAAACT
CCATCTCTAC TAAAAATCAA AAATTAGCCG GGCATGGTG CAGGCTCCCA GCTACTCAGG
AGGCTGAGAT GTGAAAATCG CTTGAACCCG GGAGGTAGAG GTTGCAGTGA GCTGAGATCT
TGCCATTGCA TTCCAGCCTG GGCAATAAGA GCGAAACTCC ATCTCAAAA AAAAAAAAAA
AAAAAGACAG GATAACATT CTAGATAGTC TCTATAATGG TCATGATTAA GACAATAAAA
TAGTCTGAAA TTGTCAATAT ATATTAATAA TAATTATT GGCCATTCTG CCAAGTAGCA
GACACCTGTC ATTCTGCCCA CTCAGCACCT CTCTTTCTTT TAGGGAATG CTACCCACTC
TTTGCAATGG TTCTGGATGG AACTGTTGAT CACAGTGTT TCACTCCCA TTTGCTCTCA

III

III

FIG. 6A(112)



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III

III

CCAGAGGTAG ACAGAAGACC CAAGCCAGGC CAGTTACACA CAATCTTCAG ATAATTACCG
TATTGATCAC AGTATCACCC CACTCAAGGC TTGGTTGGAG ATGAGCAGAA GAGACTAAAG
CTGGGTCATT TTAATTAAACA CCTGTACCCC AAAGAAAGAC TGTCAATGAG GCTTTTATAC
CGACACTCCT GGTTTCCATT CTTCCTGATG CCATTCAATT GACGAACTAC CCAATCTTTC
CAACAGTGTC TTTGGAAGAA AGATAGTCAG AAAAGAAGAT AGAGTGTTT TCTGTTCTTT
GCAACCAAGG AACTCTAAAT GATAGACTTG TTGCTAGGCA CTTTGGTTAT TTTTATTATC
TTGAATACTT CTGTGATATA CTTCCTTTGTG CATGCCCTGTT TGTACGGATG TAGCTTTTTA
TATATTTTAT ATAATTCTC AGAAGTGGAA TTAAGTAAGT AAAAGGTATG AACATTTTCT
GATTCTTAAT ATAAATTGTG CAAATGCCTT TTAAGAAGAT TATACCAGTT TACATTTTGT
GTTATATATA ACAGAAAGTA CTAAGTAAAT ATATTACAAA AATTGCTCTCT CTGTTTCAGGA
GGACTGTAA TAGATGATAA AGTACTTGAA ATAGGAACAT AGAGCATTTT CAGTTTAAAA

JJJ

JJJ

FIG. 6A(113)

JJJ

JJJ

TAATTTCATT GGGTTATTTA CGGAATCCCTT AGAATTATGG CCAGACATTT ATAGATGATC
TGTACCAAAC CTAGTTGGTT ACATAAATTG CTTATTCAAC TGGCTTAAAT CTATAATAGA
AAGATGACAC TTA CTGAATG TTTAATATAC ACTTTGTCAG GGGCTTTGTA TTATTCATG
ACATCTTCAA AATGACCCCTA CTTTCCTATT TTATAAGTAA GGACAGGAAG GCTTCAAGAA
CATGACTAAT TTTCCCAAGG GCTGTACCAA AGCCAGAACC CAAATCTATA AGGCTTTTAA
ACCTGCATTC TAAAACTGCA TCTCGGCCAT CTTATTCCCTA CAGAACTTAA GGTAGAAAG
CCAGATGGA GTCCCAATTT CACCACTTAG TAACCAGACA AACTGAGGA ATTCACTCAA
CGTCTTTGAA TCTCCATTTC CTAATCTTTA AAATAAAAC AATAATACTG GCCCTACCTA
TTTCCTAAA TTTTCGTGAG CACATAGAGC TAGTGTGGTA GAGTGTGTA CAGATGTCAA
GTGTTAGCGT GAATTACTTA GATCCCTGAA CACCATGGAT GAATGTGTCT GACTGCTATT
AGAGGTCATA AAGAATATTG GGGCCAGGTA CATGGCTTA TTCCATAAAT GCCAGCACTT

KKK

KKK

FIG. 6A(114)

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KKK

KKK

TGGGAGCCTG AGACAGGAGG ATCACTCGAG GCCACAATT CAAGACCGGC CTGGGCAACA
 TAGTGAGACC CCTTCTCTAC AAAAAAAAAA AAGCAGCCAC GTGTAGTGGC ACACACCTGT
 AGTCCCACAT ACTCAGGAGG GTGATTTGGG AGGATAACTT TAGTCCAGGA GTTCAAGGT
 GCAGTGAGCT GTGATTGCAC CACTGTACTC TAACCTGGAC AGCAGAGTGA GACCCTGTCT
 CTAAAAAAAA AGAAAAAAAA AATAATAATA ATAAAGAATA ATGGCCTTG GGATACCCAC
 TCCTCTCTTT CTGCTCTGAG TTGTGAAGCA GTTGAGTTAC ATATGCATGT CCAATGGATG
 AGGTTGAAAA TATCAACTGG ATTGGAATGT GGCTTACTTG CGTGGCCACA ATGAGCTTCG
 TAACACTTCC TGACAGGGTG AGAAGACAAA CTTCTCTACC CAGTCACTGG CAGAGCTGGA
 CACTCTGTGT CTCTCCCACA GAACAACCTC TTACTGCATG GAGGTGGATG AAAAAGTCAA
 CCGAGAACAG GCTACTCCAA AAAGCAGAGC ACCAAAGGCA CCAGCTGGTC AGTCCCCCT
 TCCTAAGTAA ACAATCACGT AATTCAATCG GGACAAAGCC AGAGAGGTGG TGTGGAGAAA

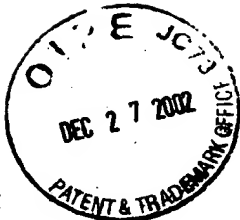
LLL

LLL

FIG. 6A(115)

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LLL LLL

GAGAGGCAG TTTCCCTCCCA AGTTTTTCCT GGAATTCCTT ATGGGAATAT GAGGTTTAGG
GGAATAAGAC TTCCCTTTTAA CAGTGAAGAA TCCCCAGCTC TATTGGTAAT AGGAAATCGC
TTACAAGGAT CATGGGGAGT ATTTCCCTCAG CTCGTTCTGC CTCCTACTTG GCTGAGTGGA
ATGGAACCAT CTGTGGCTGC TGCATATGAT ATTGTCAACT TTGTCATTC ACACCCACTC
CTTGACGCC TACCATGTGG TCATAAGACT CCCTTTAAAG TGTTCCCTTA AAAAACAAAA
TGTGTTTTGT TTCTATAAAA TACAGCTCAA TGTCAGAACC CTTGTCTTGT TTGCTCTCTG
ATGTAACCCT TTCACAATGT TTGGGCAGCT TATTCTCTCT ATTTCCCTGT AGGGTCCCAT
CCAGGCCAAA GTGAGTGCCA GCCTCATTG GGCAGCACAT GCCCTGTGGA AGGCGAGGAA
GAGACGAAAG CTAATGTAA CTTTGTGATT AGCTGTGATG GATGCCCTGGT CCTGTCAATA
GGCTCAATA AAGCCAGAAG GCCAAGCGTT CGCTTCTGCA TACTGATTGC TGAGTCAGAT
TTCTCAGTGC AGAAGGCCTT TCTAGGCAGT CAATTTTGA ATATTAGTCT TGGTTCTTAA

MMM

FIG. 6A(116)

MMM



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MMM MMM

GTGGTTAAAA TCCCTAGCTG GTCTTTAATC TGAGCCTGGA GAATTAGTT AGGGCTGACA
TTCTGCTGTG ATATTTTTC CCTCAATATA TATGTCTTTC CTCCATCTCT TAGATCCCTG
AATCATAGAG ATATATATGT TATATAATCA ACTGTCTCCA GTCTCTAAGA GTGATAAGTA
CACATTGTGT CAGGTGAGG GGACAGGAGA ACTTTCAAAA GCCTTCTTTC CCCCCTTTTC
CTTCTACTG CCTCCACTA AGTCCAGCCA CTTATTATTC AGCTGACACT ATCATCATGA
CCATGAGTCT TTTGGGGCTA CCTGGTTTCG GATCCTTTTG GAGTTTGT GCTTAACTCT
GTCTTCAGTC CTATGGAGCT GCTTTTTCAT TAAGTTTCTA TTTTGGCTAA AGTTGGCCAG
AATCTCCTTG TAACCAAAGA ACAAATAAAA TACCAGCTTG CAATGTTCTA TGTGCTTCC
ACCAAACTTA TGCAGCACTT CCTATCTAAT CCACCTACTA GTCTTTTTTT TTTTATTTT
TTTGGAGACG GAGTCTCGCT CTGTTGCTCA GGATGGAGTG CAATGGTGCA ATCTCGGCTC
ACTGCAACCT CTGCCTCCCG GGTTCAGCA ATTCCCCGC CTCAGCCTCC TGAGTAGCTG

NNN NNN

FIG. 6A(117)

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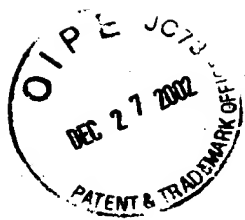
NNN NNN

GGACTACAGG TGCATGCCAC CACGTCCGGC TAATTTTGT ATTTAGGAG AGAGAGGGTT
TCACCATGTT GCCCAGGCTG GTCACGAACT CCTGAGCTCA GGCAATCCGC CCTCCTCGGG
CTCCCAAAGT GCTGGGATTA CAGGAGTGAG CCACCTCACC TGGCCCCGAC CTA TAGTCT
TTAGTGTTG CTTCCTTCTA TTGGGTAATT GTCTGTTTAT ATGCATGTCT TGTTCCTCA
AATAAAATGT GGTCTTCTCA AGGTATTGG CCCATGTTCT ATCCATCTGT AGATATCACA
GCACCTAGCA GTGTCCTTCA CAGAGGAAGT ACACAACTGG CATTATTGAT TCATTGCTCC
ATTTTTCCT TCTTTATCCC CAGCATTTCT CAATAATTTC AACATCTCC ATTGGAGTAC
CGGAGAAAGC AGGTAGCTTT ACTTGCAGCT ATGTTTCTAT CCCCATAGTA ACTAAAAGAG
GACCCAGAGA AACATGTTTA AATGCTGTCC TGTATCAGG ACCTCAGCCT TCTGATGCTC
CGTGGCTTG GGTAAATGC TTGATCATTT CCTCCCCAAC CTACACTGTG TACCTATGCT
AGTCTCTTCA TGAGGACTAA GCCCATAGT AAAAGGGCTA GATAAATAGA AAATCATTTT

000

FIG. 6A(18)

000



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000 ————— 000

ATGTAATTAT AAGAATGAGA ATACTGAGTA TTA CTGGTGT TTGTTAGGA TAAGCACATC
TTTATTGTGTA TGAGAAAAG AAAAGAGAG TGA AAAATAT ATTAACGTGC ATATAGTTCA
GGACCATGGA TTGCAAGTGA CAGAACTCA ATTCAAACCA ACGTAAGTCA AAAGGAAAT
ATATTGGCTC ATGTAACCTT CTCACAGAGA GGCAGGATG GAAGGGGCTT TGGGAACAAG
AGAAATGTTC TCAAATTCTA GGAATACTAG GATTAGTCCA GGATGGGTCA CCTTCCTGTC
CCTGAGGTG TGGTAGCGAT GGTAGAGTCT TATGGGAGGA AAGAGTGCAT GTTAGGATGA

PPP ————— PPP

FIG. 6A(119)

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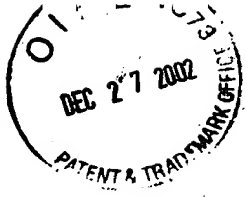
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PPP _____ PPP

AGGTAGGGCT AAGCAAACAA GGGCAAGGC CACTATATCA TGCTAAAAAT GGT TTTT
GATGCTTCC TTAATTTCAC AAATGCTTCC AACAAAGTAG CACACAGGAA AAAGAACATA
GGGACTCTAC TGGTGGGTGC TTTTATCTTA AGCCTTGAC TTGCTTTTCA CAGCTTACTC
ACTGCTTGTA CCTGAGGCCA TATGCCCTGT AAAAGCTTCT GCAGGGTTTC TACTAAGCTG
GGTTCCTTAT ATGGCTCTCT CCCATTCTG TTGCCCTCACT CTAGTGATCT TTCTCTTTTC

QQQ _____ QQQ

FIG. 6A(120)



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QQQ _____ QQQ

CTCACCTCTG GGACTGGTGG CTGTTTGAT GGACTGCCCTT AGCTTTGCTT TGGGTTTTTT
CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC TGGGCCAGGC
TCTTCCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA CCTTAGTTTA GGTCAAGCAT
TCTTGGCAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT CTTTTGACA
TGTTGTAAGA TCTATTACA TTTTGTAATT AAAGCATTC CCTATGGAAA CCAACACGAA
CTAAGCTGCT CCTGGAATGC AGGTGGCCT CCTCAATACA GGATGTTCTA GAGAGCTGTA

RRR _____ RRR

FIG. 6A(121)



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RRR

RRR

TTTGGGCAC TTAACATATC TCCACTACTT AGGCACAGC ACTGAAATTA ACACCACTAA
GTTGTGATG TCCATGTAGT TAGTCTCAGG CAGTGCAGCC TCAGGAGTGG AACTGACCTC
TTATGTGTGT CCAGCCTTTC TTCCTTCAGA AGTCAGCTGT GTTTCTGCT GACTCTCCAT
AGGAACATCA GTCCTGAATC CTCAGACCAC CATCTGGAGT AGTAAGTGCT CCTGACAGTC
CTAGAAGTTG TCTACCGCTG GATCTCCAAA GCGTGTGACA CACCGTGAGA GAGAAATGAG

SSS

SSS

FIG. 6A(122)

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SSS

SSS

AAAGCTGGGC TCTTCAGGTA AATCTTGCTT TTTCACAAGC CCCCTAATTT TACTGCATAA
TTATTTTGAA TTCACTGATA ATTTCTACAA TTTTCCCATTA AGTCATCTAC ACACAATACC
CTCTCATGCA ACACTTGGCT TTGCTAATAC ATATCTATTA TGAGAGCTGT GCTTCTTAAG
CGTAAATGTT TTATATGCAC TAAGGCTCTT GGCTTACATA TAAAGGGGT ATTGAGCAAT
GTGATACAGA AGTCTTTTCT CCACAGGTCT CATATGTAA GAATTCATTA GATTGGCTGA
AATAGACTGA TCTGTCCATT TCTCTGCTCA CTTATCATTA GGAAGTCATT AGCTAAGGAA
CAAAAACACTAC AATCTATGTA ATTAGAAGAA CAAGCTGGTT TTGCTCAATA TAAAAATAAG
AAAAGAAAC CATGTGAAAG TCAAAATATT TGTTTAATCA GGTCATTGAG AATCTATTA
AAAGTATTG AATCTTTTAT GATGAGAACT ATCTTGACTC AAGTGGACAG TGGTGAGCTT
TTTGGCCTGT GGTCCCTACG TAGAAAGGAG GCTTTGTCAT AAAGTCTTAT ATGGTACAGG
TGCCAAGTTA AGTGCCCAAG CTTGCTCTTA AAAGCATACT GGATTTTGT TTAGACTTTT

TTT

TTT

FIG. 6A(123)



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TTT

TTT

AGTGAAGTGA AGGGAATAAA CAAATCCCTC TGGGAGAACT TCTCCTCCAT CCTTGGTGAA

GTCAATCTGC CAGAAATTC

FIG. 6A(124)



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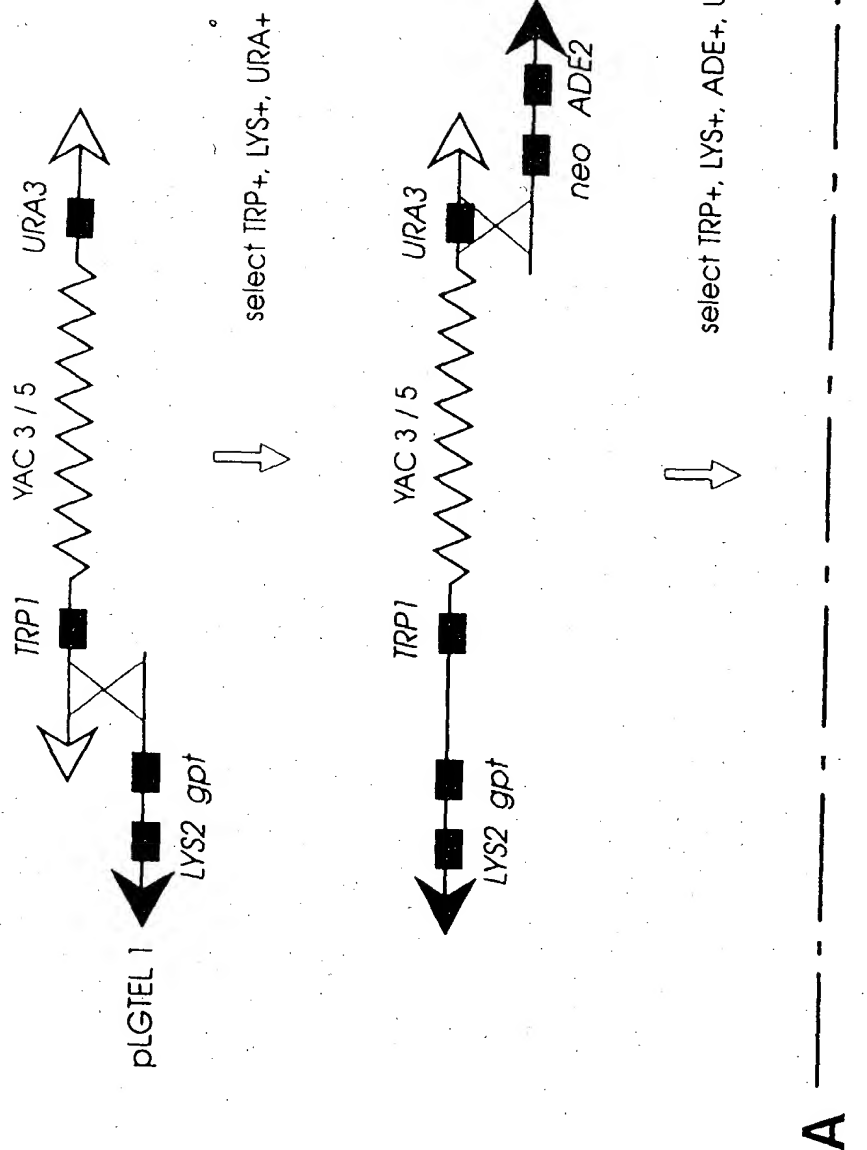
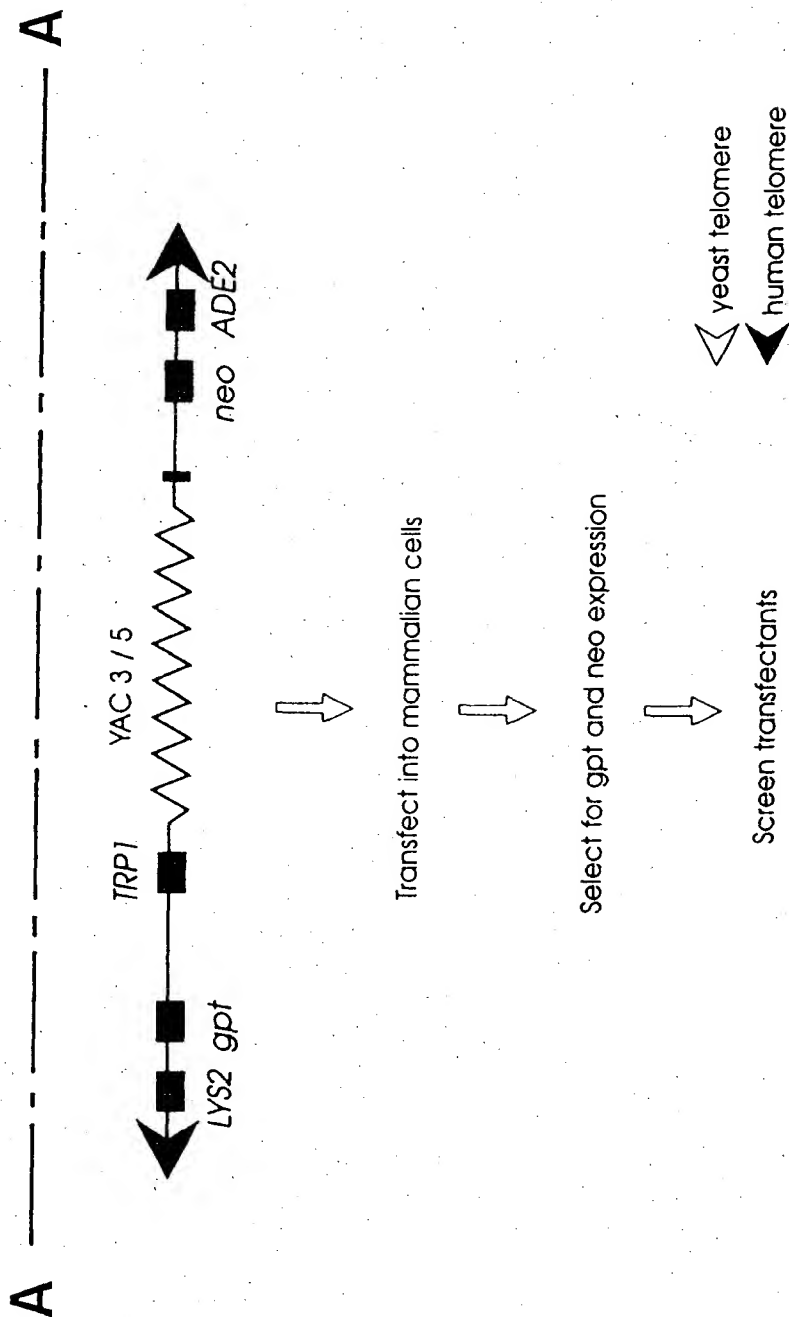


FIG. 7A

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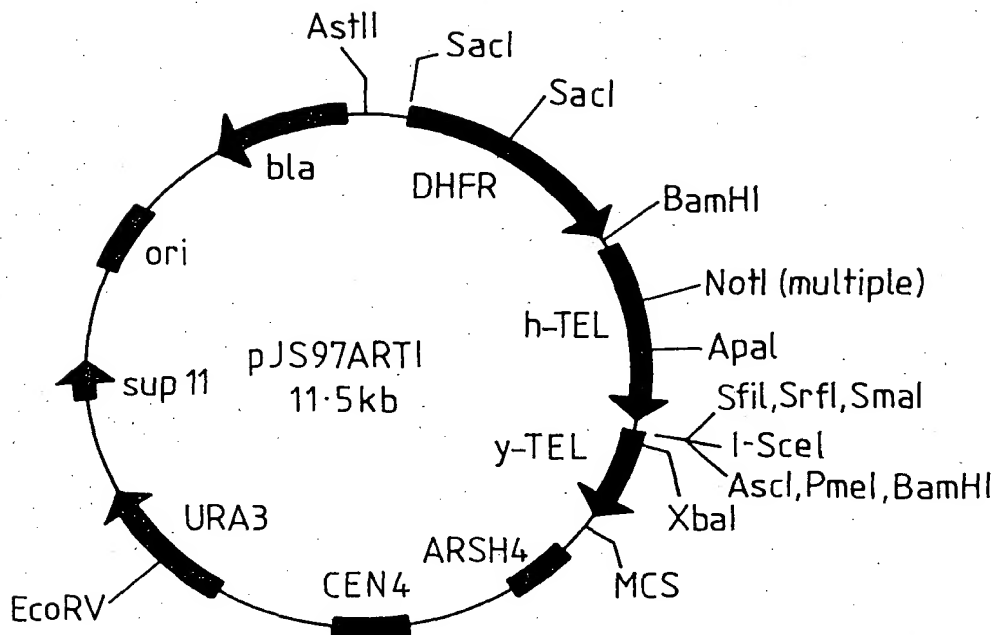


Procedure used to retrofit YAC 3 and YAC 5.

FIG. 7B

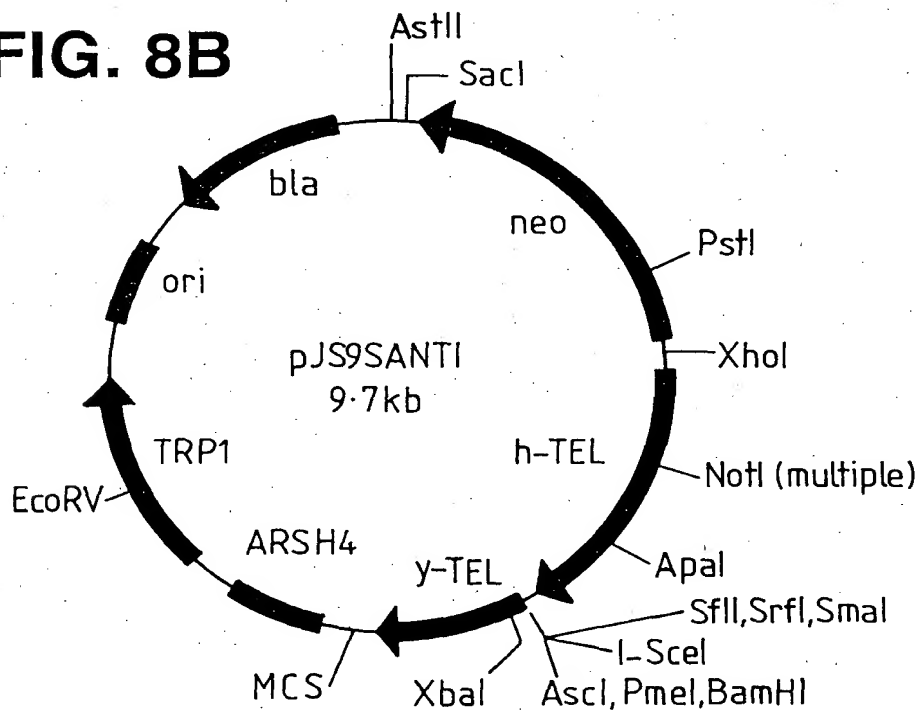
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FIG. 8A



MCS = T7, EcoRI, BglII, NotI, XmaII, SstII, SalI, NruI, NheI, BstBI, ClaI

FIG. 8B



T7, EcoRI, BglII, NotI, XmaII, SstII, SalI, NruI, NheI, BstBI, ClaI

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FIG. 8C

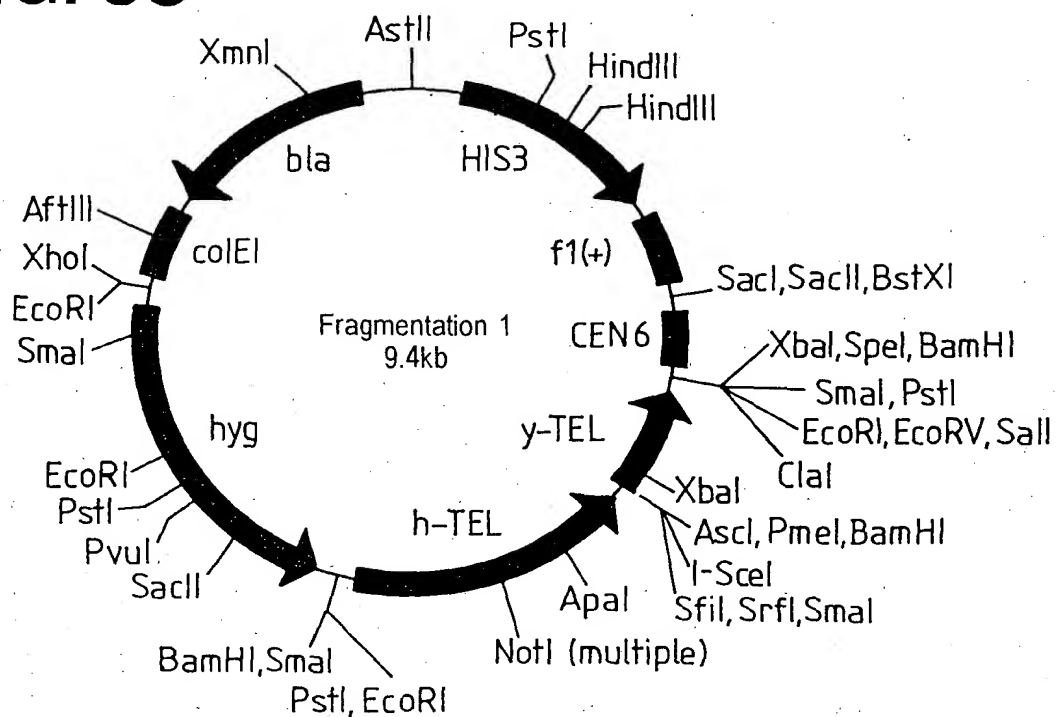
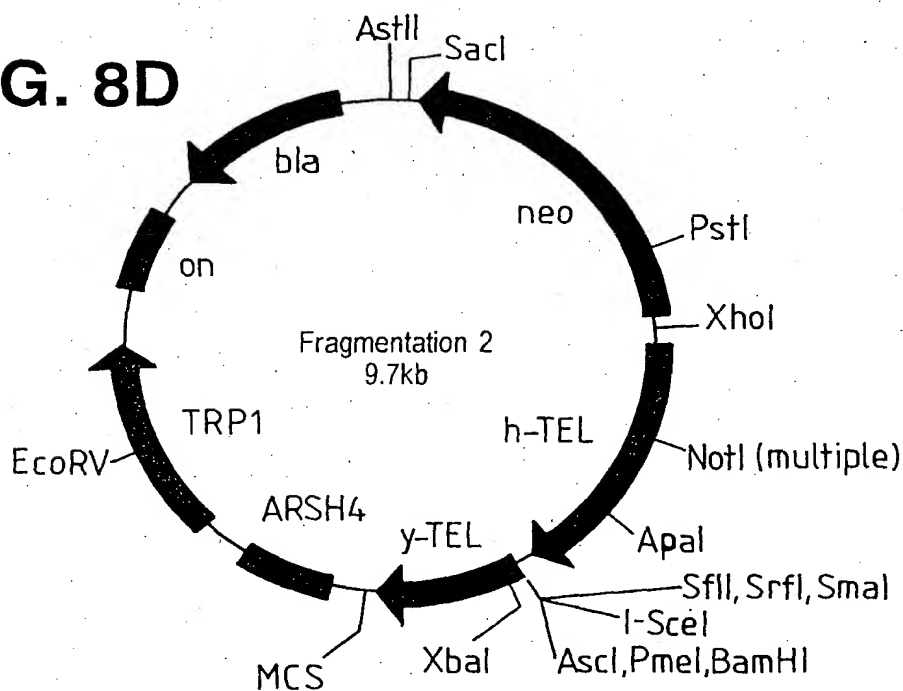


FIG. 8D



T7, EcoRI, BglII, NotI, XmaIII, SstII, Sall, NruI, NheI, BstBI, ClaI

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FIG. 8E

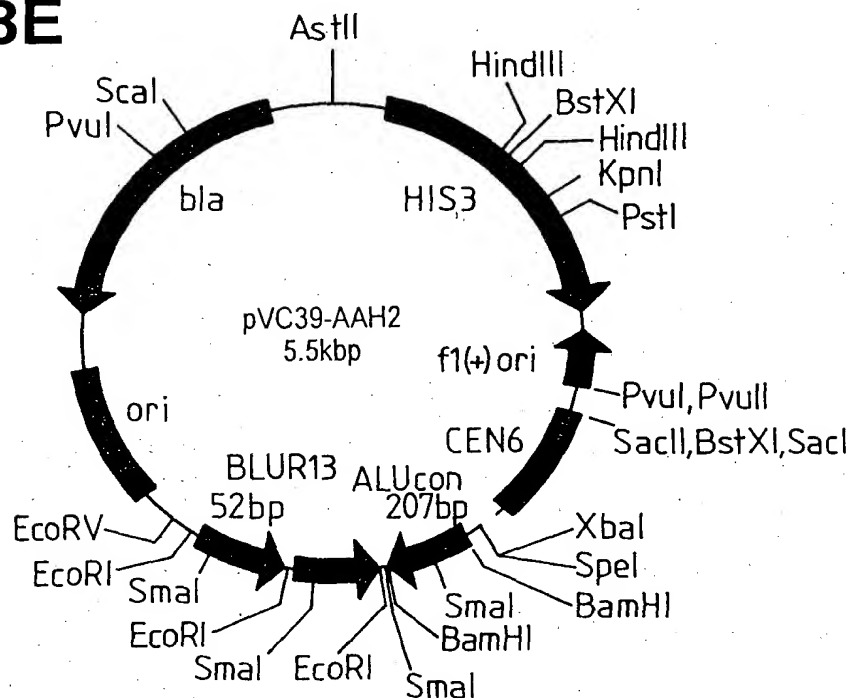
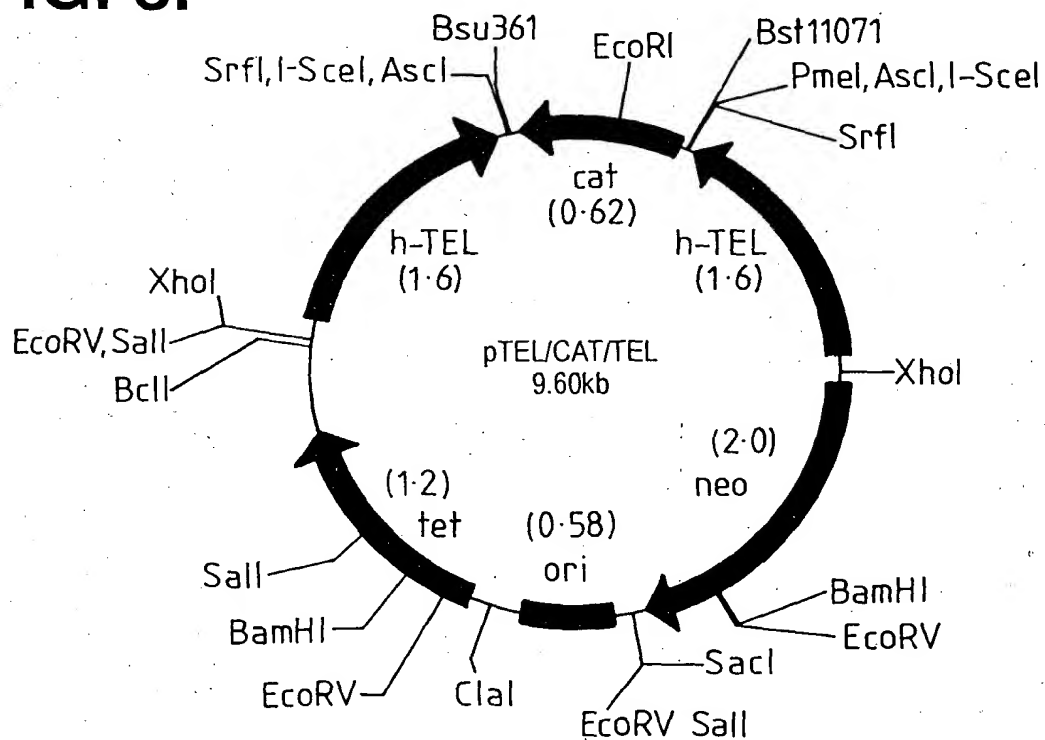


FIG. 8F



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FIG. 8G

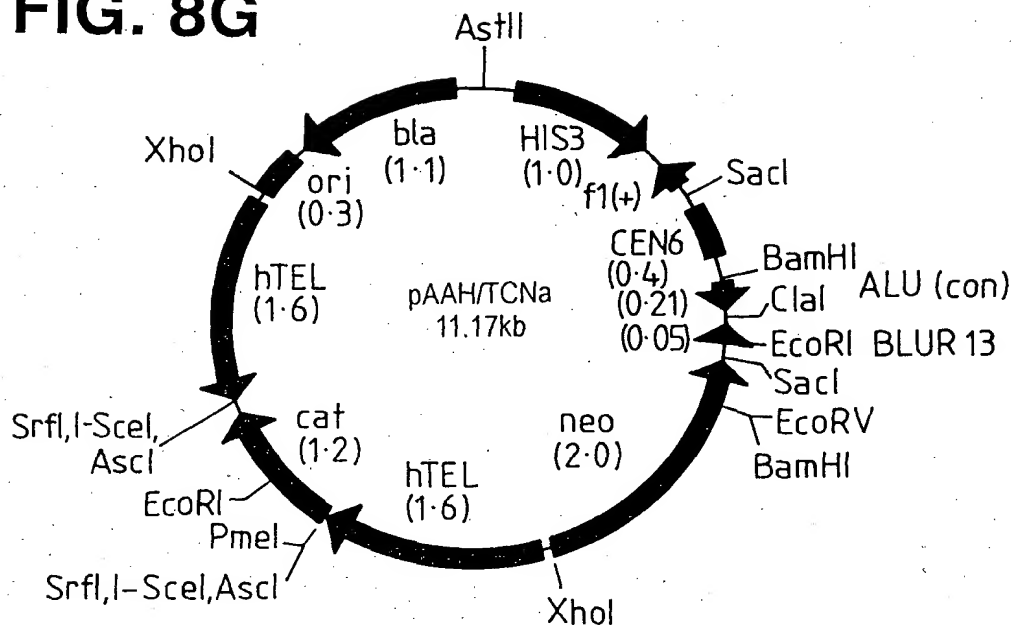
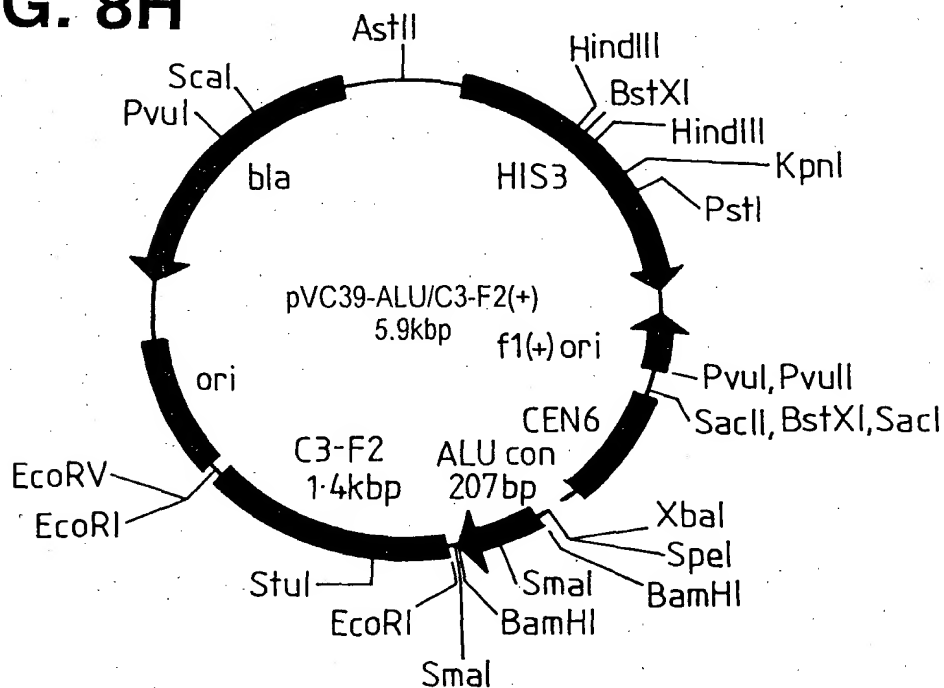


FIG. 8H



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FIG. 8I

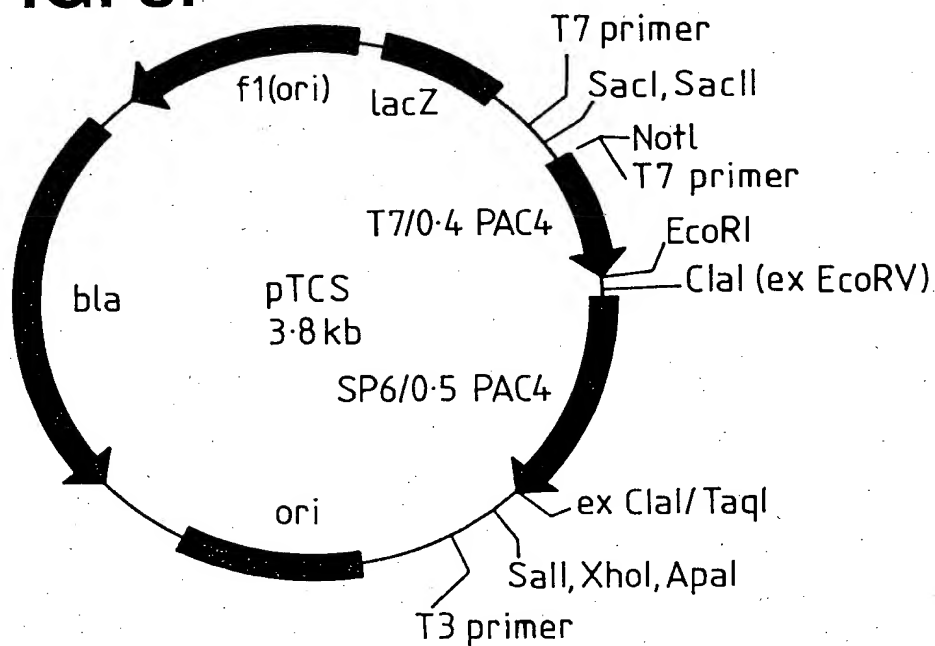
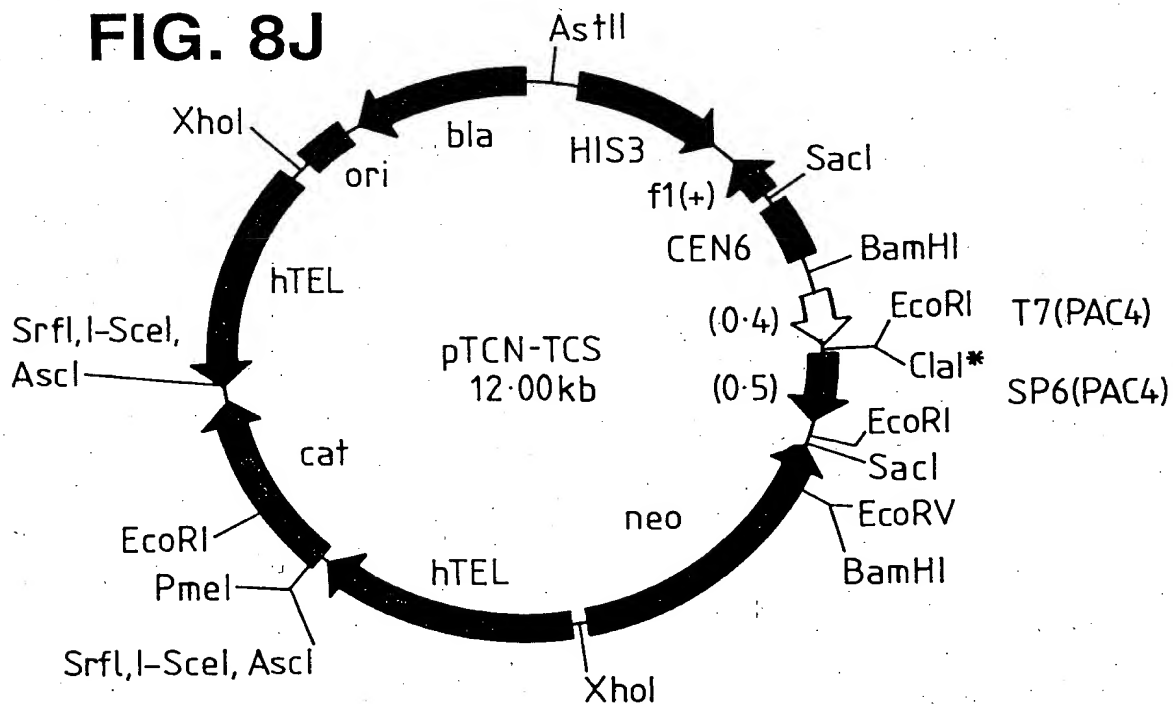


FIG. 8J



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FIG. 9

Circular TAR

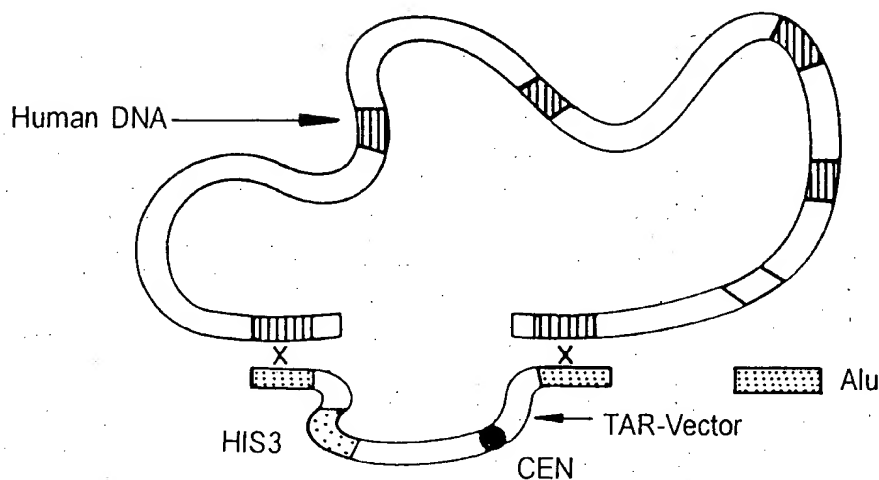
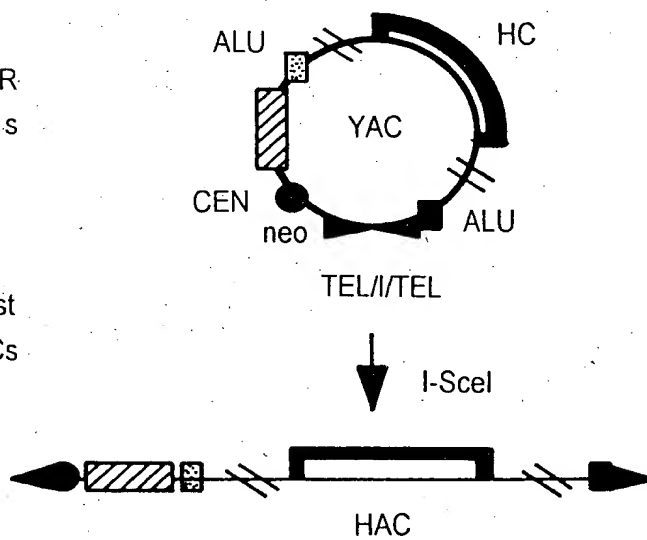


FIG. 10

Shuttle YAC to HAC

1. Circular TAR
to create YACs

2. I-SceI digest
to create HACs



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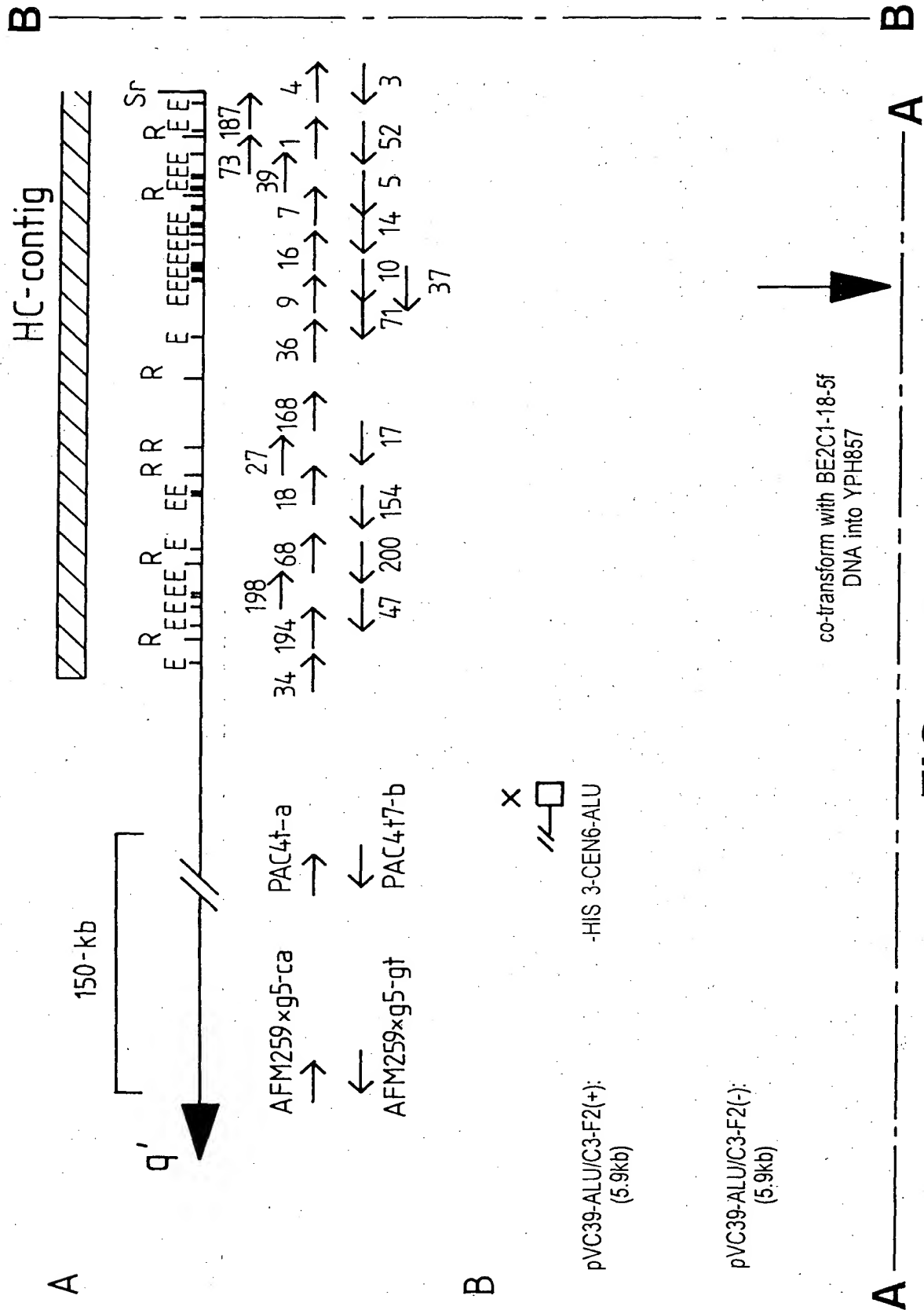


FIG. 11A

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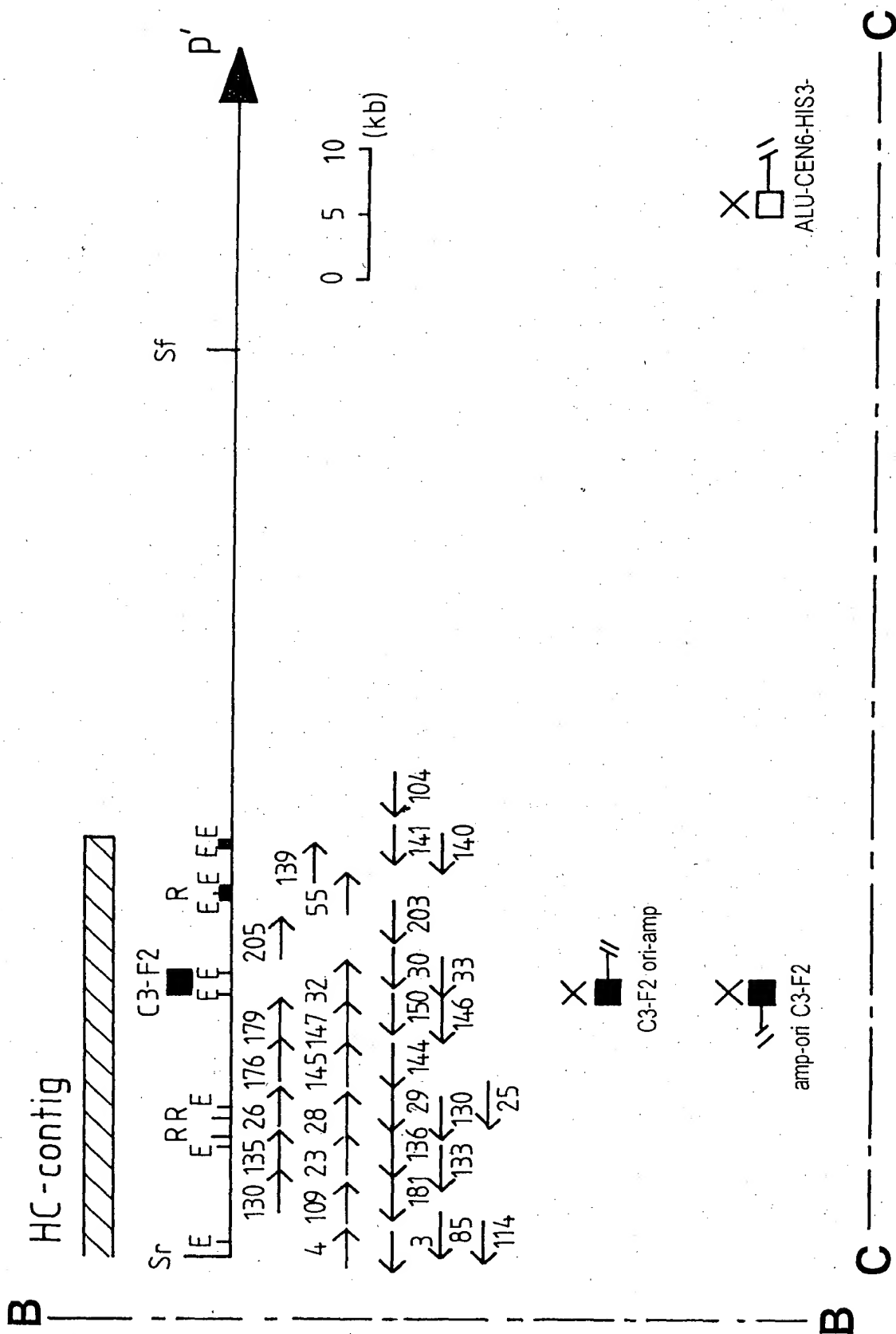
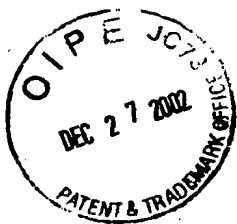


FIG. 11B



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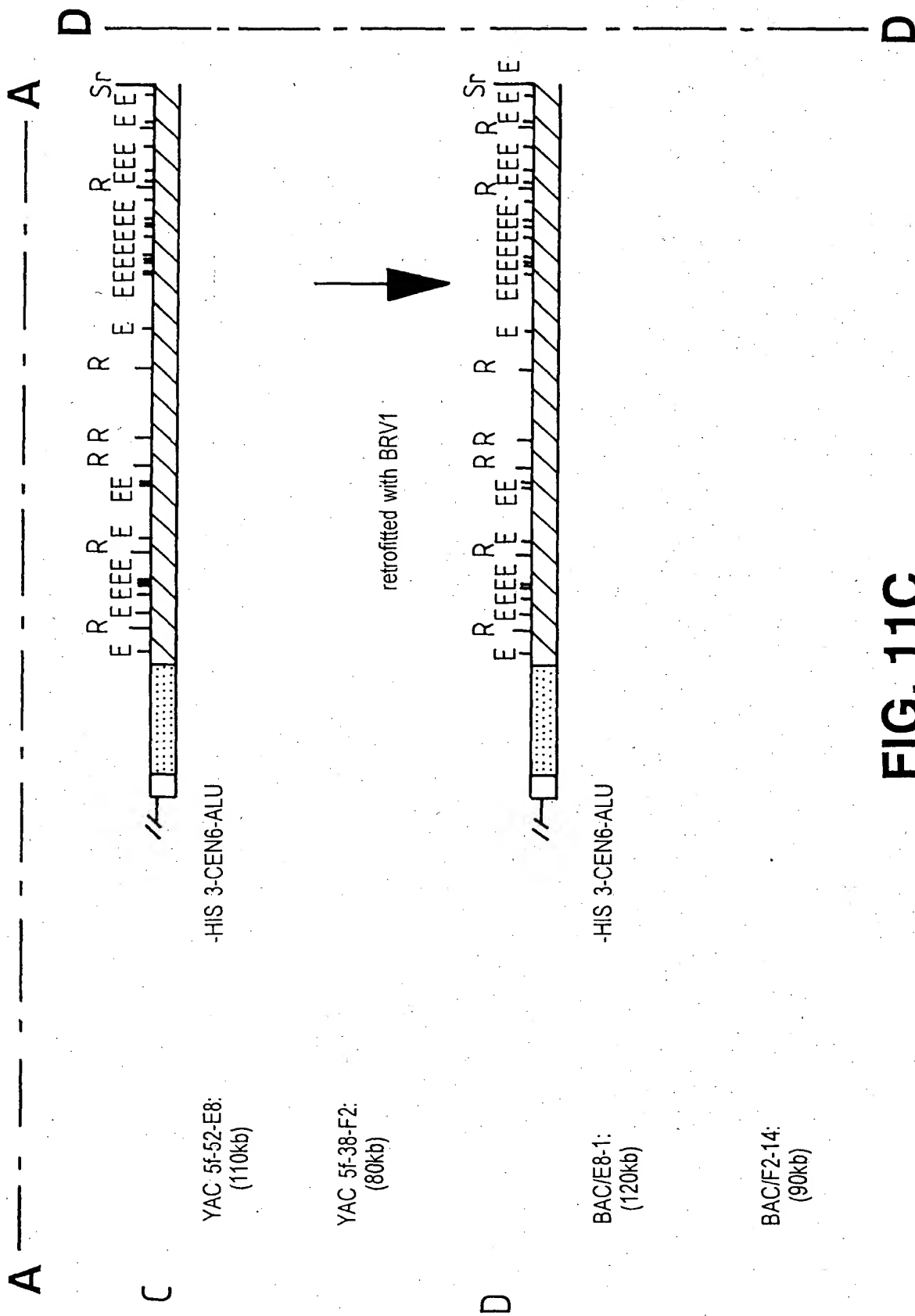


FIG. 11C

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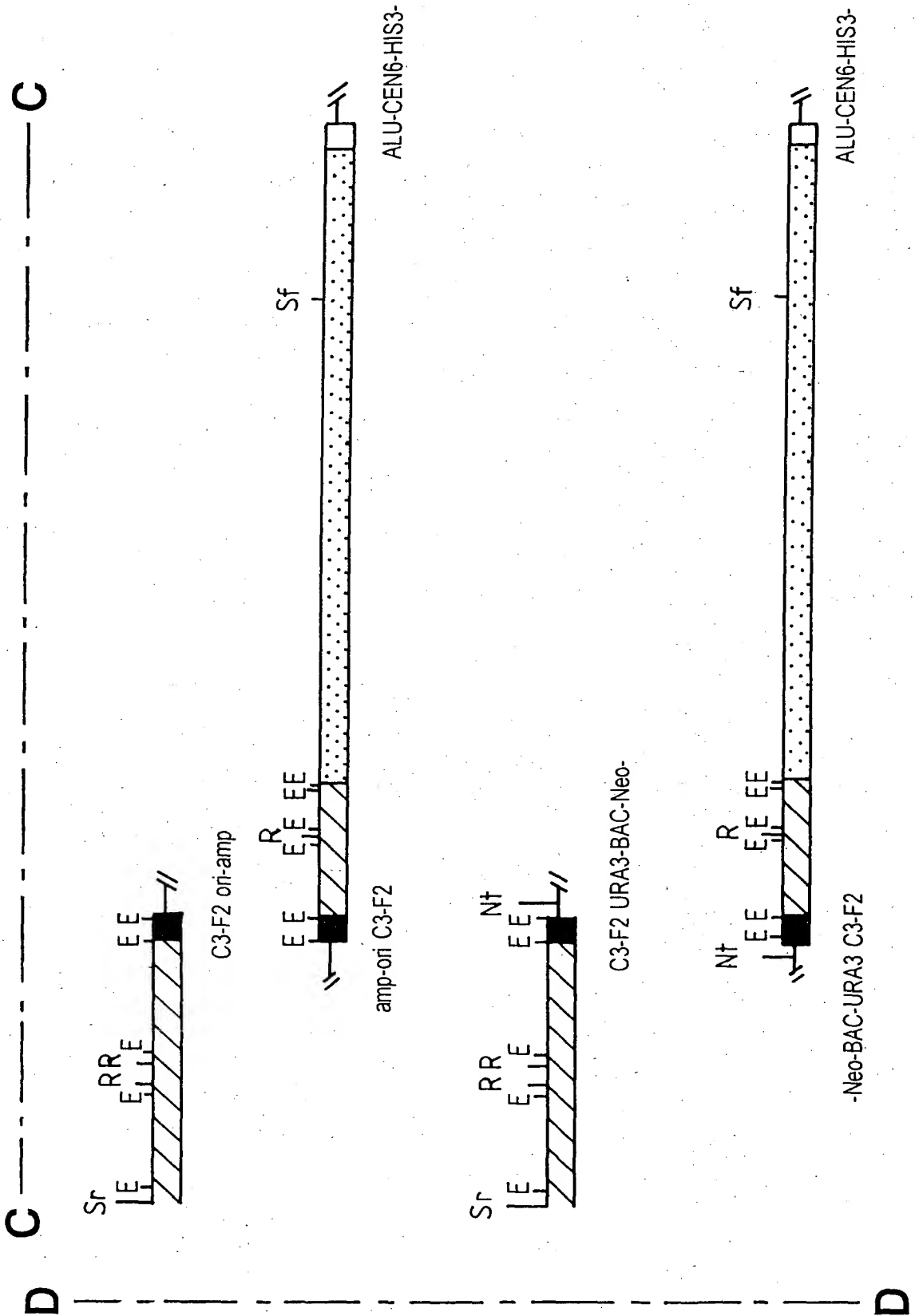
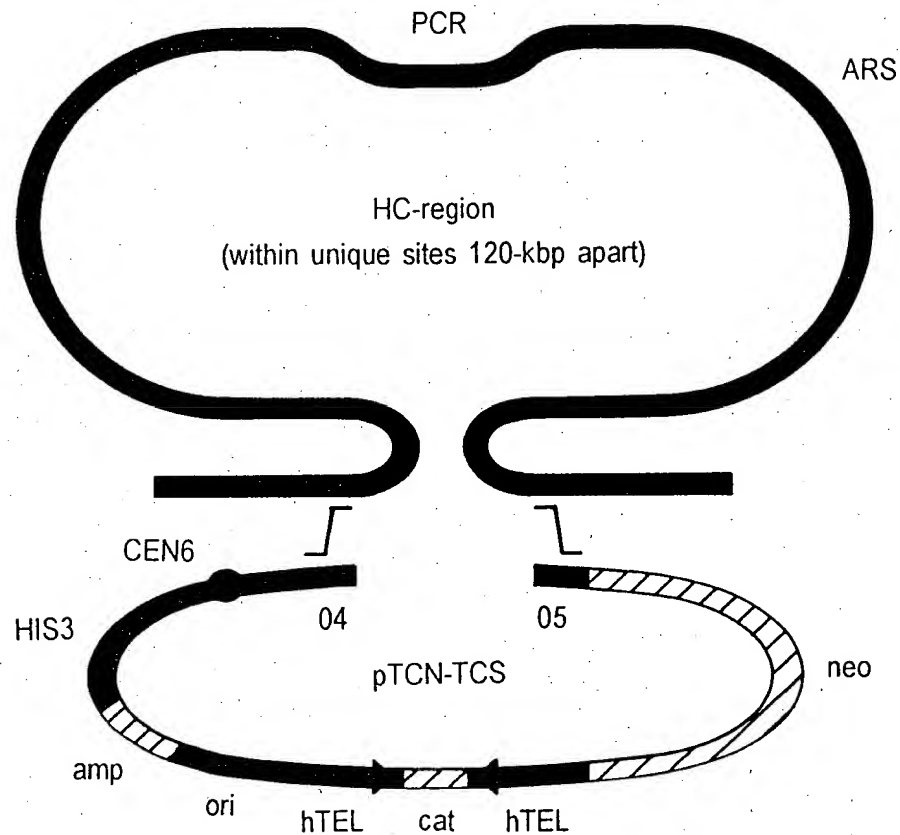


FIG. 11D

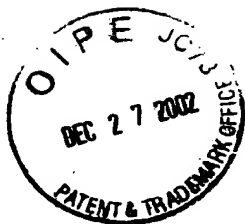
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Specific TAR of HC-region from mar (del) 10



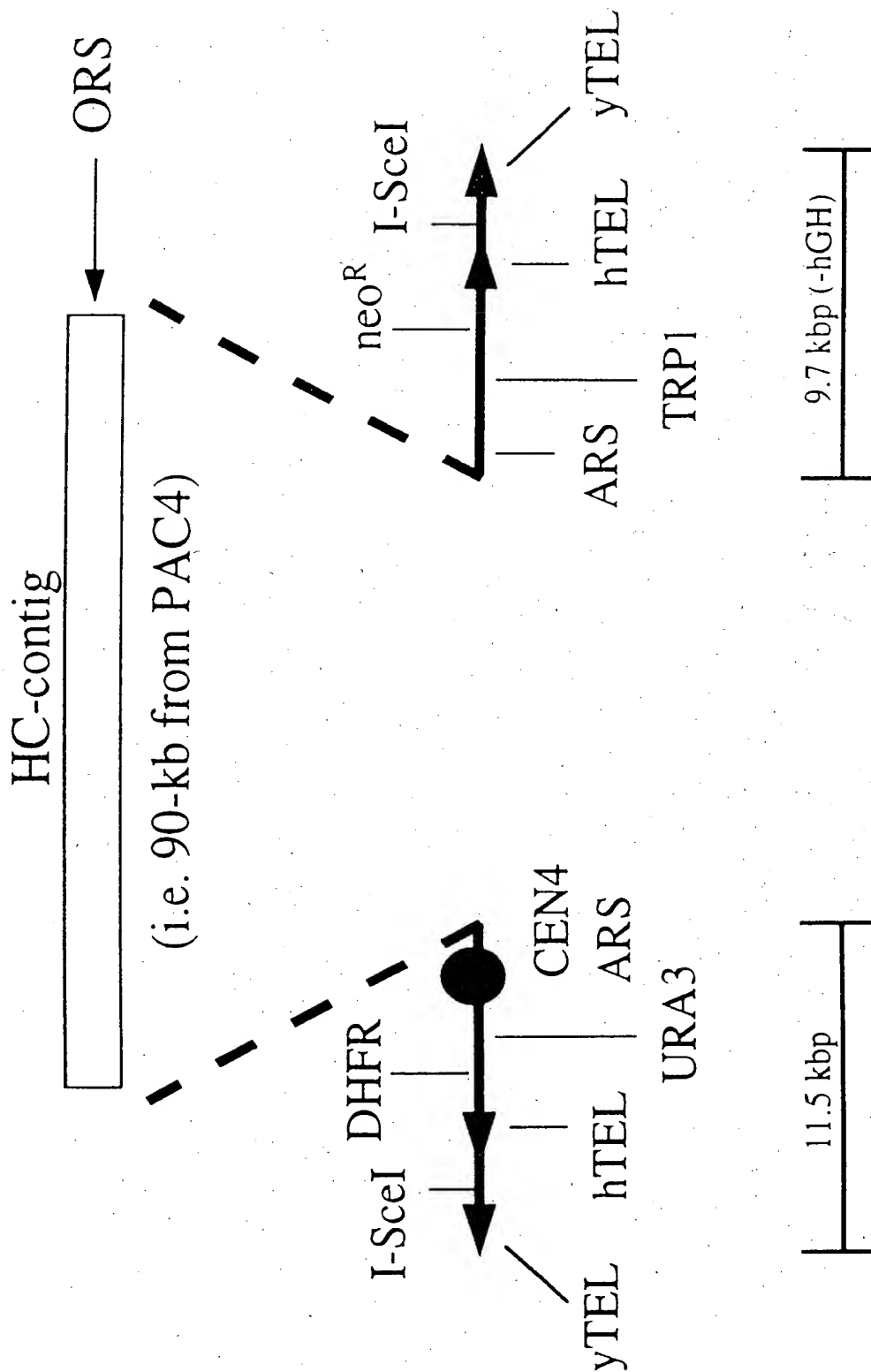
1. Co-Transformation into YPH857
2. Select for HIS⁺ colonies
3. Screen for HC-region by PCR
4. Prepare high-MW DNA
5. Digest with I-SceI to expose hTEs
6. Transfect HT1080 cells
7. Select for G418^R
8. Analyze by PFGE and FISH

FIG. 12



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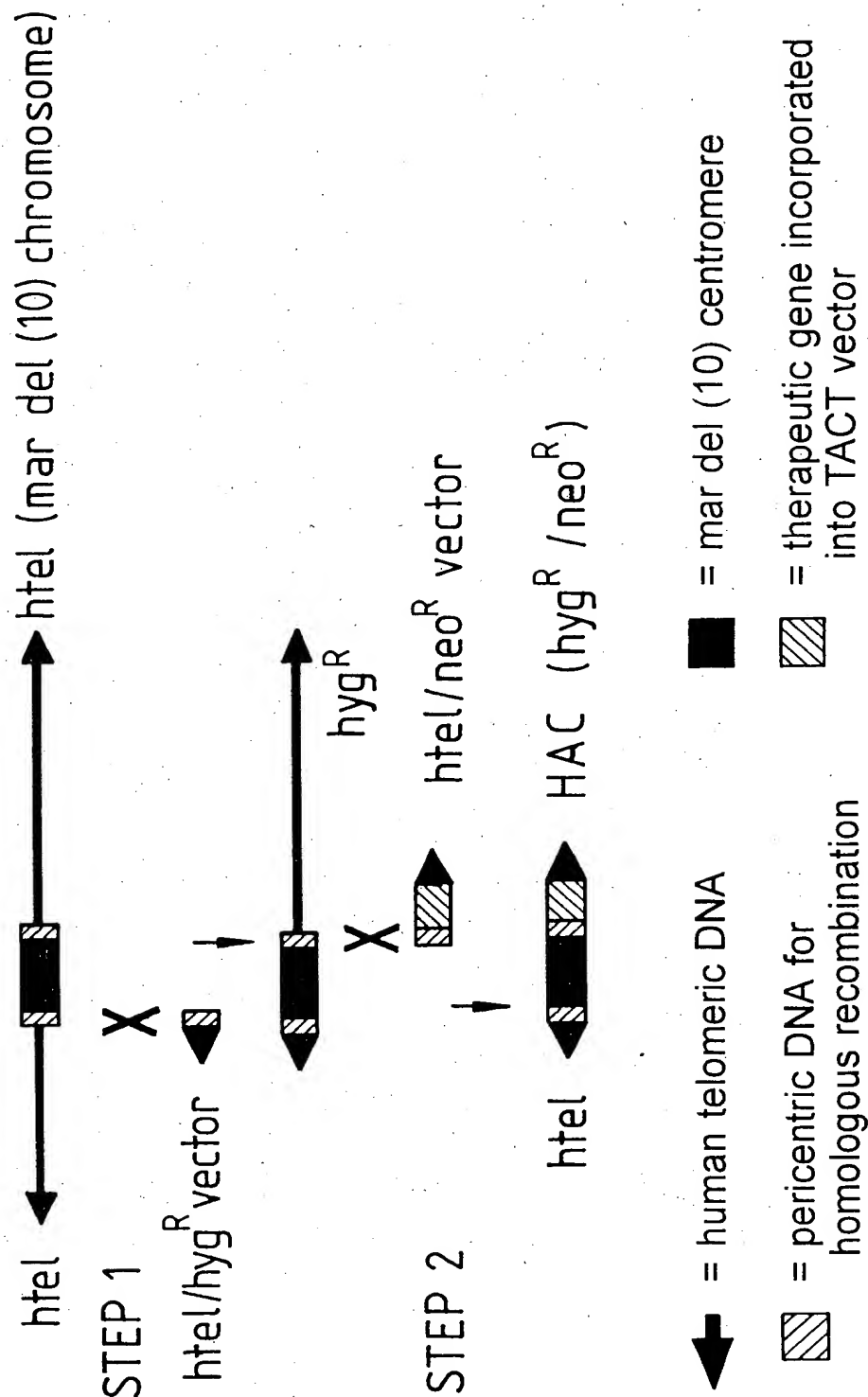
Cloning in Yeast as YAC/HAC

FIG. 13

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FIG. 14

Outline of TACT procedure



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TACT constructs

FIG. 15A

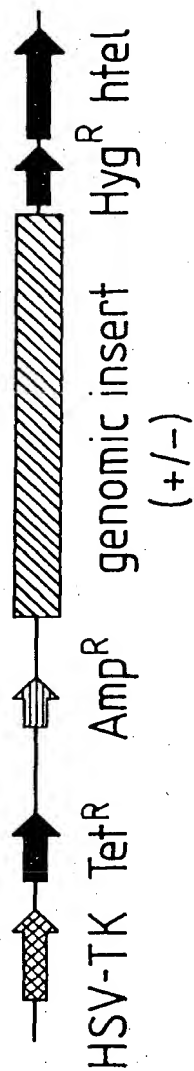
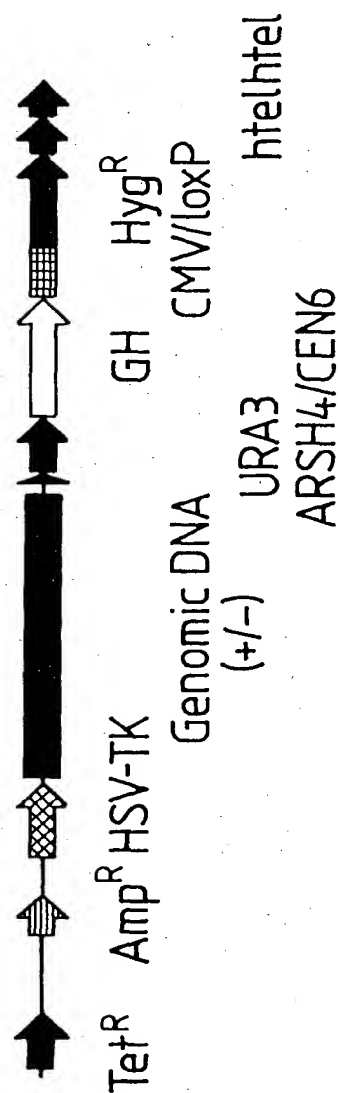
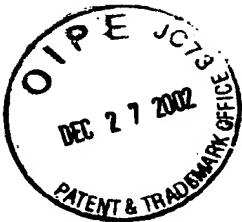


FIG. 15B





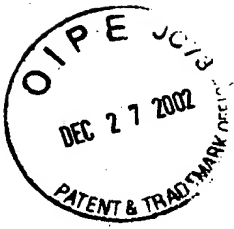
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NC-Contig (80225 bp)

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CTTTTTTTTTTAAAGTTTAGATGTTATGTTTCCATTATACTTAAAGTGGGTGCTTATAGGCAGCAT
ATATCTGGGCTCTTGATGATTTATTTAATCTGATAATCTCAACCTTTTTTGTGGAGTGTTAGGCCATTT
ACATTTAGTGAATTATAGACATGGTTTGATTTGCTATACCATCTTTTCATTTTGTATATGTAGGCC
ATCTTTTCATTTGTTCTTTTTCATCTTTGACCATTTTCTTTAGTACTGAATACCTTTTTTGTATTTTCAT
TATATCTATTGGCTTTTATAGTTATACCTCTTAAAAATTTTTTCTGTTTATGTAGGATTTATAATAT
ACATCTTTAACTTATCAGAGATTACCTTCAAAATAGTATTTTACCAGCTCAAGTGTATGTAGAAACCTT
ACAAAGAGTATATTTTCATTTCTGCTCCTAAATTTTATGCTATGCTATATACATACATAGGTTGTGT
TGTTTGTTTTACCTTATTTGCTGTTGGCTGGGTGAGCAAAACATTTTCTGTAAGGGCTAGATAGTACA
GGCATACCTTGGAGATACTGTGGGTTTGGTTCATACCCACCAATAATACAAATATGCAAGAAAGTGGA
TATCACAATAAAGTGAGTCACACAAAGCTTTTGGCTTCCCAGTGCATATAAAAGTTTGTCTTATAC
ACTGTAGTCTGTTTCAGTGTGCAATAGTGTATGCTAAAAAACAACATACCTTAATTTTAAAAATGCTTT
ATTACTAAAAAATGCTAACAAATCATTTGAGCATTCAGTGAGTTGTAATCTTTTTTGTGGTGGAAAGTCT
TTTTCTTATTGATGACTGATCGGGGTCAGGTGCTGAAGCTTAGGGTGGCTGTGGCAGTTTCTTAAACA
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TTTAAACAACCTAAGTTAATAATAATTCTGAATCCATTGTTGTCATTTCAACAATTTTCACAGTGTCTT
CACCAGGAGTAGATTCATCTCATTTCTGAGATGGAATCTTTGCTCATCCATAAGAAAGAAATTCCTCA
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CCAGTTCTCTTGTGTTTCTACCAATCTGTGGTTCCCTTCTCCTCAATGGAAGTCTTGAACCTCTCCAA
CATCCATGAGGGCTGGAATCGACTTCTTCCAAATTCCTGTTAATAATTTATATTTTGACCTCCCATGAAT
CATGAATGTTCTTAATGGCACCTGGAATGGTGAATCCTTCCAAAAGGTTTTCATTTTACTTAGTCCAG
ATCCATCCATCCAGAGGATCCACTTTCAATGCCAGTTATAGCCTTATGGAATGATTTCTTCAATAATA
AGGCTTGAAAGTTGAAATTAATCTCTTCTTAGCAGTAGGCTCAACATGGGCTTAAAAATATTGGTCCAC
AGCAACATTAATCTTTTGTACATGTCCATCAGAGCTCTTGGGTGACCAGGTATATTGCCAGTGAGCAG
TAATACTTTGAAAGGAATTAATTTTCTTAGCAGTAGGCTCAACATGGGCTTAAAAATATTGGTCCAC
CATTCTGTAAACTGATGTGCTGCATCTAAACTTTGTAGTTTCATTTATAGACACAGGCAGAGTAGAT
GTAGCATAAATCTTAAGGGACTTAGGATTTTTCAGAAATGGTAAATGAACATTTGGCATCAATTTAAATCAC
TAGCTGTATTAGCCCCCAACAGAGAGTCAGCCTATTTTGTGAAGCTTTGAAGCCCAAGCGTCGACTTCT

FIG. 16A(1)



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A

CCTCCCTGGTTACAAAAAGTCCTAAATGGCATCTTCTTCCAATATAAGGCTGTTTTATCTACATTGAAAA
TCTGTTGTTTAGTGAGCCACCTTCATCAATGATACTATCTAAATCTCTTGGATAACTTGTGCAGCTTC
TACATCAGCATTTGCTACTTACCTTGACTCTTATGTAATGGAGTGGCATCTTTCCTCGTACCTCATG
AACCACCTCTGCTAGCTTCCAACTTTTCTCTGTAGTTTCTCTGCCTCTCTCAGCCTTCATAGACTTG
AGGATAGTTAGAGACTTGCTTTGGATTAGATTTTGGCTTCAGGAAATGTTGTGGCTGGTTTGATCTTCT
ATCCAGACCCTAAACTTTATCCATATCAGCAATAAGGCTGTTTGGCTTTCTTATTTATTTGTGTGTT
ACTGGAGTAGCACTTTTAAATTTGCTTCAAGATATATTTCTTTGCAATTCACAACTTGGCTGACTGGTGCA
AGAGGCTAGCTTTCAGACTATCTTGGCTTTTGACATGCCTTCTCACTAAGCTTAATCATTTCTAGCT
TTTGATTTAAATGAGAGATGTAGGCCAGGCACAGTGGCAGGCACAGTGGCATATGCCTGTAATTCCAA
CACATTAAGAGGCCAAGGTGGGAGGATTGCTTGAACCCAGGAGGTGGAGGTTGTAGAGATCACACCACT
GCATTCCGCTGGATGACAGAGCAAGACCCCTTTCTCAAAATAAAATGAGAGGTGTGCTTCTTTT
GTTTGAGCCCATAGAAGCCATAGTATGATTTTAAATGGCCTAATTTCAATACTGTTGTCTCAGAGA
ATAGGGAGGTCTGAAGAGAGGGAGAGAGGTGGGGAATGGCTGGTCAGTGGAGCAGTCAGAACACACAT
AACACTAATAAATGTTTGTCTCTTATATGATGTTGTTGATGCCCCCAACAATTACAATAGTT
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GACTTGCTCCATGTAAGTTTGCCATACGCTTCAATTTATAAAAAACACAATATCTAGGAAGTTCAATA
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GCAACTGCTCACCTCTGCCATTATAGCATGAAAGCAGCTATAGAAAATATACATAAATGAGGCCCTGTAA
TCCCAACACTTTGGGAGCCCAAGGTGGATGGATCACTTGAGGTGAGGAATTCGAGACCAGCTTGGCCAA
CATGGCAAAACCCCGTCTCTACTAAAAATACAAAAATGAGCCAGGACTACGCATGCCGTAGTCCAGC
TACTTGGGAGGCTGAGGCAGGAGAAATCTCTTGAACCCGGGAAGGGGAGGTTACAGTGAGCCAAAGATTGT
GCCACTGCACCTCCAGCCTGGCAACAGAGTGAGACTGTCTCACAAAAAAGAAAAAGGAAAAAGAAAAATA
CACATAAATGAATGATGTGGCTGTGTACCATATATCTCTCATGCTTAGCTTGCCAAACCTTGCTTTA
CACTGTCAGTTACCTTCTAAAGAGATTAAAAATCATAACAATATCTATTACGTTTATTACATCCTAGT
GTCATTTCTTCTTATGTAGAATCAAAATTTCAATTTCTGGTATCATATTTCTTCTTTCTAAATAATTTCTCT
TTAATAATTTTATAGCACAGGTCTAATAGCAATGCATTTAGCAATTCATTTGCTATTAGACCTGTGCTA
TAAATAGCAATGAATTATGTCAGTTTTTATTTGTCTGAAAAAGTTTTTGTTTTTTGAAATATACTTTT
GCTGGGTATATAAATCCATGTTGCATAACTTCTCTTTTCTTCAGCACTTTAATGAAGTCACTCAGTTAT
CTTCTGGCTGTATAGTTTCTCTGGCTGCCCTTCAAGATTTTTCATTTGTCTTTAATTTTAGCAGTTTG
ATGTGCTAGGAGTATTTCTTTGTATTTATCCTTTTGGGGCCCTCTTAATTTCTTTGTATCCTTTTTT
TCTTTTTTTTTTTTTTAAACCATTTTGGGTCTTTCCCCCCTATTGGGGTGAAAAAAGAAAAAATAA

B

FIG. 16A(2)

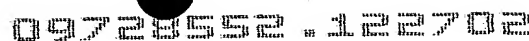
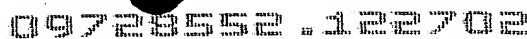


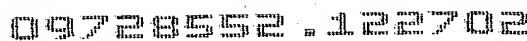
FIG. 16A(3)



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[illegible]

FIG. 16A(4)



D

W

FIG. 16A(5)

L

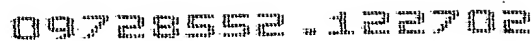
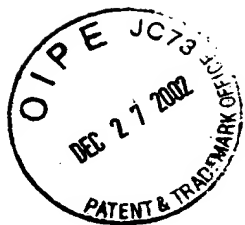


FIG. 16A(6)



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F

TACCCGAAGCTGCCTCTCAACTTAACAATCCATGAAAGAAACAAGATGGTATATAAATTTTCTAATTT
GTGATGCCTTTGTTTATTTGTTTCCGGTTAAAGAGAGAGGTGGCATTGAATGTTTGGTTTGGTTTGGTT
TCTTCTCAATAAGAAGCATCTTAATAATAAAGTACTGGACATCTGTCCCATTTTCAAAAATTACAAGT
TTCGATCATTTGCTAAATTTGACAGATCCCAATCTGTCTGCTGACATACATTTGCAATTTATAAAGCAG
AAGCAGACTAGCAGTCTTTCTAATGCAATCCCCCAATGCATGAAGTATAGATGCTTCTCCCTATTG
GTTTCATGCTGCTAAGGCTTAAAGGATCATTTGATTTTAATTAATGTTGACAGCAGGCTGAGC
TTTCTTTCTTTTAAAGGGAAGAACCTTCAGGGGCAATGCTTTAGTTTAAATGTTAAATCTCATTTT
TCTTTGAAAATAAGAAGTTAAAGCTGATTTACACACAGCTCTCAAGTCCAGATTTTTCATTTGTGTTT
TAAACCATCTAGGAAATGTTTGTATTTCTAATGAAACATTAAGTCTGAAATTTGGGCTGAAATTTGCTGGC
TGAAAATATTGTTATAACTTCACATGATTTCCAGTGTGATTTATTTTCTTTTCTTTTCTTTTGTAC
CCGATATAGATGAAGCGAAGAGACAAAGGAGCAATCCCATGTGTAATAAATAAAGGCAAGCTGAAATGT
TGTTGCTGTTTGTGAAATTTAAGCTGTTTCAATTAATTAATGCTAAGTAAAGTCCAGGACTATAAATGTT
GAACATTTTACCCTGTGATTTAAATTTAGTTTAAATGTTTCTTTTCTTTTCTTTTCTTTTCTTTGAT
GGTTTACATTTTCCCATGGAAAGCAGCTATGTCATGTCGGCATGATTCATCATGTTAATCATCTCGGGT
TATTTTGGTTTGTGTTATGTTTCAAGAAAGCGAATGCCAAATAAAGAGTGGTTTGTGATGTTCTAGTGT
GTCTTCTTTTAAACAAATCAAGGCTTTTATTTAATCCACTTAATGGGACACTGCAGAAATTTAAATAAT
GGAAGTCCCATCCACAGAAAGCAGGTAATGATGTAATAAAGTTTAGTGGGGATTAATAGAGTGATC
ATATAATTTATGAGCTAAACCGGAGGCACTTTTCTTTTGTAGATCGAGTCTCACTGTTGCTTAGGCTGG
AGTCAGTGACGTGATCACAGCTCACTGCAACCTCCGCTCCCGGTTCAAGCGATTCTCATGCTCAG
CCTCCTGAGTAGCTGGGACTATAGGCGCCCAACCATGCCAGCTAATTTTGTGTTTGTAGAGA
TGGGTTTCAACCATGTTGGCAGGCTTGTCTCAACCTCCTGACCTCAGGTGATCCGCCCCACCTCGACCT
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AAGCTGAGAAATAATTCATGATCTCAACTGGGACCATCCAGGCAAGCCAGATGCCATTACCACTAGC
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GTAAGTCAATTGAGGTAGCTCTGTGCCAAGGAGCAATATGGTAGAATTTCTAATTTTCAAGGCTGCAAC
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GGCATAAACGCTAATGCACCTGATGTAGCTGATGTTAAATTTGTTATCAGCTAAAGATCTTTTCATAATA
AATAAATTATCATTTGTAGGAGGCGACAGAAATCGTGGAAAGCTGGGATTCAGGTTGCCTGTGGCTTT
AATTCTGGAATCAGAAATATTAGTCAAGGATATCAGTCTATGAAGTAAGTTTCAATGTTATATGCCAC
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GCTTCTCAAAATCTGTGAGAAATCGTATGTGCTGCTTCTTCTTTTCCCGAAGGCTCTTTTGAG
GTCTTTCAAGAACTCAATTCAGCAACAATTAGGGGTTCTAAGGTATACAGACGCTGTGCAAGAT

G

FIG. 16A(7)

G

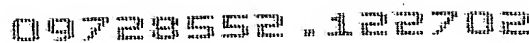
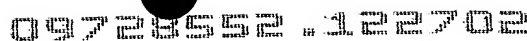


FIG. 16A(8)



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工

CCAGAGAGGCAGGCTCACGCCCTGTAATCCAGCACCTTTGGGAGGCCGAGGTTGGGCAGATCACCTGAGGT
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TAAACCAACCAACAAAAAPGAAAAAGAAAAGGAAAGAAAGACAAAAGAAAGAAAAGAGAGAAGG
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AAAGAAAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG
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GTTATCAATATACCTAAATCACTTAGTACTGAATCTGGCATATAGTAATCACCTAATGAAGAGATAAGA
GTCATGGAGTATTCTGAAGCAATTAGAATCAATAGACTCAATATAGACATGGCAACAAGTTGGATCCT
AAAAACCGACCTGAGTGAAAAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG
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CCCTATGGGTGGTGGCTGGAGTGGGGTAAAGTCCGTAAAGCTGTAATGGAACCTAAACAAATACATGAA
ACGAGTAGGAATCAGAAGGAGTAACAATAAAAAATGTCCATGAACCTGAGGAGTGTAATAATCAACTC
ACTGCATCTGAGGTTAAAAATAGAAAGATGATAATTGTTATTCTTATTACTCCTAGGCTTCCACTTGC
ACTCAGCTTTACAATGTTGGACTATCCCTCAGATGGCACCCCTCCTTGCACTTGCTCAGGACGAGAGCT
TTTTCCCTCCAGCTTCTAGGTGATTTAATATATCAGGGAATAAGTATAAAAAAGGCACGGTGCTCCCT
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TTAGGGCAAGGTATAAACTGGCACAGAAAAATGTGATTTATTGTTACTATCCCTTACAAGCG
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TCTAGCAACTGCTCACTGCTTCATTTCCCTGCCCTTGGTCTTTAAATACTGCTTTTCTCAGCTCAATTGGC
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FIG. 16A(9)

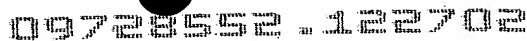


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TTTGCAAAAAGGCTGGAAGCTCTGACTGGGACCCCTAAATATGCAAAAAGTTAATAGGCTCTTCATGCA
GAATATGAACCCCGTGTATGGATATAGCTAAAGGTTGGCCTTTATGTTTCTATTCCTTCACAAACCTG
GTAGAAATAGATATGCTTGTTCCTTTAAAAAATGTCAACAATTCATTTATGATGCTGTGTATAGTAA
CTCACAGATCATGCTCCATGAAAATGCTTCAGAACCCCAATATAAGGAGATTTTTTAGCCATGTGTGACA
AAAGAGAGGCCATTTTCAGTGTGAAATGTTTCAGAGAAATTTGATTATGTTTTCTCAGATCTTTTTTA
TTTTTATTTTTTTTGAACACAGAGTCTCACTTTGTCAACCCAGGCTGGAGTACAGTGGCTGTGGCTCGGC
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GGCATGCACCACCATGCTAATTTTTGTATTTTAGTAGAGACAGAGTTTCGCCATGTTGACCAAGCT
TGCCCTTGAACTCCTGACTTCAGGTGATCCACCCACCTCAGCCTCCCAAGCACTGGGATTAACAGGCATG
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TCCTTTCTTATTCCTACAAAATATGTTTCAGTATAGCTGATGTTATGTTTCTTTCAAATTAATTCATTTTC
TCTATCTCAGAAATTTATCTCATGCTAATGTTATTGAATAGTCTTCACTTCTTGTCTCATCCAGTTTCTG
GTCTCTTATTTCACTCTAAGTCTAATGGCTATTAGAATAAAGAGCTTGTAAACAGATTCCTTCTCCTCAAT
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GAACATGCTGACTCCTCTCTCCTGAAAGCAATGCCCCAAGCACAGCATTGTTAGATAGTATGTACGCCAA
CAGGGACATGGGTGCATAGCAAAAACCTAGAAGGAAGGAGGACCTTCCTTAGCAATGGGTGATATGGTCC
CTGGACTTAGACTCCAAAGGCTCGTGAGGTGAACACACATCGTCCATACCCAGGAAGCACACAGGTGG
GATGGAAGAGCTGTGCCTAATGAAACTTCATCCAGTGGAGGTGGAGGCTGCAGCTGCAAGAACTC
AGAGCTGCCTTACCCAGACCAAGGACCAAGGAGGCTTTCTGGAGGAACAGCCTCTGAACCTGCCAGCT
GATAGAGGAGCTCTACCTCAACTCTCTGTTCCCCAGGCTGCTTTCCACGTCATTTATTTGGCACT
GAAGTTGAATACCTTCAGGGGGCCGAAAGCCTGCCAGTCTCTCTCTGCAGAGCAATCACACCAAC
CTGCAAAAGGCTAGGAAAGGCTGTCACTCTCTACTCAGAAACTGTTCACTGGAAGGACTCAGGG
GCCACTGAATACATCCTGGCAGCTTCACAAGAAGGCTCTGACTCAAGGATGTTTCCATCTTTGCCA
GGTGGCTTTTCTCCTTCTTAGAGTTTGGAGGACGCAATGTCTGAGAAGTCAACCTTTCCCTGCAA
GGTGAGACACAAGGGCTTTCCAGCAGAAAGAGAGCAAAATGGAAAGTCTCTTCTTCCCTCCAGTAGA
GGATGGACTCTGTGGCAGCCACCCAAACAGGAAAGCACAAATGCATGCCTGCCTGCTTCCCTCCCTCC
CTCCGTTTCTCCCTCCCTCCCTTCTCCTCCCTTCCATTTCTTCCCTTCCCTTCCCTTCCCTTCCCT

FIG. 16A(10)



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[illegible]

FIG. 16A(11)



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K

CAAATAAGGAATGTATTAATAGTCCACAATCAATGGTCAGTTAGCCGAGGGAAGATTAGCATAGTTAA
AGACTTAAATGGCTTAACAACATATATCAAAAGGACAAATAAAGGGGAACAGAGTCTAGAAAATGAGGA
AACTGGGACACAGGCAAAATAAATGAGAACTGGACATGAATAACGCAAGGGATAAGACTAATAC
ACAAAACACCCCAATAAATAGCCAGCATTTGCTGAGCTCTTACTGTGAGCCTGTTCTAAGCACCTTAC
ATATATTAACTCATTTCTCAAGGAACCATCTGAGGCAGGCACTGTTATCATCTCCATTTTACAGA
TAAGGAATAGACCCAGAGAGGCTGAGCAACTGGGCTATTCACAGCTACTATGGTGGAGATGAGATTT
AAATCTAATCATTTGGCTCAGAGCCCATGACCCCAATGGCTGCACTAAGTGAATGCATGCGCTATCAAC
GTTGCCAAAAGTGGGCCACAGCTCGGATCTGCGTTTTCCAGTAGCCAAAGCAGAGAGTGTGATCAGACC
TCACCTTAATAAGCAAGTCTCAAGCCAGAGAGAGGTGGTATCAGGCAGCAAAACAGGCTGCTAGTCGAAA
TCCCACCTTCTCTGAGTGGTCCATACAGTTTACTCTACTTGTACAGAAATGAAAATAGCTGGAGT
TCAGGTGCGCTTCAATGCCCTGTTGTGAGGATTTGGGCTTTTCAAGTTTATTTTTGTTGTTTTTA
ATAGACTGTACTTTTTAGAAAATTTTTAGATTTACAGAAAAGATTGAGAGGATAGTACAGAGAGTTCCCG
TATACCTCACACCCAGTTTCTGCAATTTATTAACCTCTTACATTATCATGCGGTACATTTGTTACAATTAAT
GAGCCAGGCGCGCGGCACAGTGGTTCAGGCCCTTAATCCAGCACTTTGGGAGGCAGAGGCAAGCG
AATCAGTTGAGGTCAGGAGTTCGAGACTAGCCTGACCAACATGGTAAACCCCTTCTGTACTAAAAATAC
AAAAAATTAGCCAGGCATGGTGGTGGCTGTATTTCCAGATACTCAGGAGGCTGAGGCACAAAGAT
TGCTTGAACCCAGGAGGGGAGGTTGCAGTAAGCCGAGATCGTGCCACTGCACCTCCAGCCTGGGCAACA
GAGCGAGACTCCATCTCAAAAAAATAAATAAAGAAAGAAAGGAAAGGAAAGAAATTAATGAGCCA
ATATTGAGACATTTATTACTAAAGTCCATGCTTTATGACAGATTTTCTTAGTTTTTACCTGCTGTCT
TTTTCAGTTCCAGGAATGCATTCAGGATGCCATACCACATTTAGTTCTCATATCTGCTTAGGCTCCTCT
TGGCTAGACTGAGTTTAAATCTACTTTCTGCAGAGCCTGAGAACTTTAGCATAAATTTCTTGAAATTAC
AGCTCAATATTTCAAGCACTTATACAAACAGCCTAATGTACGTTGGCCCATACAGTGTTCAGAGT
AATAAACTTTCTTTGTTCTGTGCCGATTGAAAGAACTGCTGCTTAGCCTCCTGCCAGATGATGAACGTG
GGTACACACGAGCATTTTCCAGGTAAGCATATTTCTGCGACTTCTTAAGCTGCAGCCTTATATGCA
ATAATTGTCCATTTACAGACTTATGTTTCGAATTTTCAGGCACCTGTTTTCACATAACCATATCTTCAAC
TTTGATAAGTACTGCTTTAATCACTCAGAAAATTTAACTTGACTAATTTTTTTTCCACCATCAGTTTTTT
TTCTGTTGACTCTTTCTCTTTTCTGTTTGGCCAGAAACATGCTCAGGATTTCTCAGGCTTTAAAAA
ATGAAAAAATGTTTCTGCAATCTAGTTACTCTCTGATTCTCTGTTCTGTTTATCGCTGGAATTTCTTG
AAAGCTTGGTGTATTAGTCTTTTTTTCATGCTGCTGATAAAGATATACCTGAGACTGGATAATTTATAA
GAAAAAGAGGTTTAAATGGACTCACAGTTCCAGGTGGCTGAGGAAGCCTCACAAATCATGGTGGAAAGCAA
AAGGCATGTCTTACATGGCAGCAGACAAGAGAGAAATGAGAACCAAGGATTTCCCTTATAAAACCATC

L

FIG. 16A(12)



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L
AGATCTTGTGAGACTTATTCACTACCAACAAGAACAAATATGGGGTAAACCGCCCCCATGATTCAATTATC
TCCACCGGGGGCCCTCCCAACAACACGTGGGAATTATGGGAGCTACAATTCAAGATGACATTTGGGTGGG
GACATGGCCCAAAACCATATCACCTGGCCTATAGCATTATTTCCATTCTTCCCCCATCCTTTTATTCCTCA
AACCGGTACAACACAGACCTCTTTTCTTCTACCTGAAACTGCTCTTTTGAGGGTAGCTGATAAG
TCCAAAATACTGTGACACCTTTCTCAATTCCGTTCTTCTATGCTTTGGAGCAATTGACTGTGTTGGT
TGCCCCCTCCTTTAAAGTGCTCTCACTTGGTTTTTATGACTAATGATCATGATTTTCTTTTCCCTCTC
TAAACATTCGGCTATCTTTTAGCTTCCCTTCCCCCTCCCATCCCCTAATGTCTTGTTCCTCCAGAAT
CTGCCTCACCTCTTTGACTTCTATGCCCCGTCACTCACTCACTGGTCTTTATTACATTATTGCATCT
GTGTCAATAACTCTGGTCTTTCTCTTAAAGTCCAGTCTCCCATTTTCAAAATGTCCCCAGACATTTCCAA
TTGAGTATCTCTCCAATGTATTTAACCTGCTAAATATCTAACACATAATCTTTCCCATCAAAATCGTTTC
CTCTTAAGCTTTTCTTATTTCTATTAGTACTCTCTGCACTTCTCCAGGAGCCCCAGACTTAAACCTTG
AATTTCTCACCATAACTCTCTTTTGTCTCCCATAAATCAATTAGTAGCAAGTGTATCAATGATTACTT
GACAAATATCTTTTCTATTTCCCTCCCTGCTATGATCATTCATCTAGCAAGAAGAGTTGGCCCTTTGTA
TCTGTGGTTTCTGCATCCCTGGATTCAACCACTGTAGATGGAAAATATTTGAAGAAAAGCGTCTAT
ACTGAGTATGAAAAAATTTTATTTCTTGTCTATTATTTCCCTAAACAATACAGTATAACAACATACAGCATT
TACACTGTAGCGTATAGATCTTATAATCTAGAAATGATTTCAAGTACACCATTATATATAAGGGACTTG
AGCATCTGTGAAGTTTGGTATTTGTGGGCATACCTGGGACCAATTCCTCCCATGGATACAGAGGGACAAC
TATATTTACTAGTGTCTACTAAATACCAAGTTGGCCAAATGTGTTTTCTTTTCTGTTTCTGTTCTCTT
AGTTTGGCCCTTGCCAATTAATTAATAGTGTGCTGCCAATGCCAGGTGACCTTCAGAAATTTCTATTCT
AATTTTGTCTATCTCCAAGCTTAAAAATATTTAATGGGCCAGGCGAGTGGCTCACACTTGTAAATCCCAG
CATTTTGGGAGGCCAAGGGGGTGTATCACTTGAGGTGAGGATTCAGAGCTCCAGACCGCTGGCCAAACATGG
CGAAACCTGTCTCTACAAAAAAGTATAAAAGTTAACCAAGTGTGGAGCATTTGCCCTGTGGTCCCAGC
TACTCAGGAGGTGAGGCAAGAGAAATCGCTTTAATCTGGGAGGTGGAGTTTGCAGTGAGCCPAGATCTC
TCCACTGCATCCAGCTGGGTGACACAGCAAGACTCTATCTCAAAAACAATAAACAACAACAACGAA
AAACATTTAATGGCTGCACCTTGCCCTGTGAAAAATGCATTTCTTGGCCAGATGTGGTGGCTCAAAACCTG
TAATCCCAACACTTTGGGAAGCTAAGGCCAGGAGTTCGAGACGAGCTGGGATATATAGGAAGACACAAT
CTCTACAAAAAATAATCCACAATAATTAGTCAAGCTTAGTGTTCATGCTGTAGTCCAGGTACTCAGGA
GGCTGAGGCAGGATTCTCAAGCCCCAGGAGTTCAGGCTTCCGTGAGCTATGATGGCACAACCTGCACCTC
CATCTTGGGTGACAGAGCAAGGTCCCTATCTCTGGAGAAAAAAGAAAGAGCATTTCTTAGGAGAGT
TCTTCTCTGTAGAGTCTAAGGTTCCATGGAACTCCTTAAAGCATCAGAGTATGTGAGTGCATATGGG
AGGAAGCATTTAGCCAGAGCAGTTGTGCTCCCATTTGCATATTAATTTTAAAAAACAAGCTATAAAAA
AAAGTTGAAAACTACTACGTTAGCATCAGCCTGACATTTAATGGCCTCGTAAATCAAACTTAATTGAC
M

FIG. 16A(13)

M



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M
TTTTAGCCAGTTATGCTACTAGCCAACTACAGACAACACACACTTTTTAAACCAAATTAGACTAATAGTTG
TCATCAGTGGAAATCAAGTTTGCCATTCTTCCATGCCCTTGCTCACACCACTTACCTTTTCTGGAATGTC
CTGTACTCATCTTCTGTGTTGAACTCTATACCCAACTTTAAACCTAGCTCAAAGTTCAAACACTTCC
ATTCCATTTCAAAAGAGCTTTCCCTCTTCCCTTAAAGTTTAAAGAACTCATTTTCATGAATCTTTTGGCA
TTTATTGCACACATGCTTGCTTGTGTTATTGTTGTTTCATGCCCTCATATGCCCCCAAGGTGTTTAGAC
TCCTTAACGGCAAAATGATGCTCTAAACACCTTTCTATCTTTTCATAGTGTCTTAGTCTGTTGTTG
CTATAAGGAATACCTGAGGCTGGGGAATTTATTTAAAAAAGAGGTTTATTTGGCTCACAGTTCTGCAG
CTATAAAGAAAGCATAGTGTGAGCATCTGCTTCAGGTGAGGCTTCAGGAAGTTTCCACCCATGGTAGA
AGGCAAGGGGAGCAGGCATCACATATCAAGAGAGGAGGAAAAAAGGAAGAAAGGAGGGTGCCA
TTCTCTTTCAACAATCAGTTCTTGTGGGAATAATGGGACAAGAGGCTGGGCACGGTGCATGCCCTG
TAATCCAGCCCTTTGGGAGACCAGGTGGTGGATCACAGAAAGTCAGAAAGCCTGAGACCAGCCTGGC
CAATGCGTGAAACTCCGTCTCTACTAAAGATACATAAATTAGATCTAGCTGGGCTGGTGGCGGTGTAC
CTGTAGTCCAGATACTCAGGAGGCTGAGGTAGGATAATCACTTGAACCCGGAAGACAGAGGTTGCAGT
GAGCTTGTGCCACTGCCACTCCAGCCGGGGCAACAGAGTGAGACGGTCTCAAAAATTTTAAAACTTTA
AAAATAATAGAGCAAGAAAGCAACCAAGTTATTTCAGGAGGGATCCACCCCAATGACTCAAATACTCTCC
ACCAGGCCCTCACTTCCAACACTGGGGATCAATTTCCGTATGAGATTTGGAGGAGACAAATATCCAACT
ATATCACATAGTAATGAACATAGTACCTTATCTATAGAAAGCAATGGCTAGACAACTGTTGAATGGCTA
ACCAAATCTGCTTCTCTATGCTCGCTCTAGAGGGGTCAGTATGAGTTTCTGTCAAAAGGAGAAAAA
AAAATGTATAGTCAGTTTGTGTGTGTGTGTTTCATGTAAAGAGATCAAGAGAAAAAGAACAGAGAA
ATCATGAAAAGGAGGGGAATATAAGAATAATACATAGAAAAAGCAAATTATCTTGTATTACAGTAAT
ACCAAGGGGTAGAAATGGTAAGTAATAATCCTTCTTCACTTGTCTGTAGTTCACTTTTTTGCACCT
TTATTTTGATGAATTCACATCGAAGACATTAACCTCATTAAAGGCTTCCAATATTTTGGAGATAAGAAAG
GCTGCTATGCTCTTTATAGATGGAAGAACTTGGTCAATTAATACTCAACAAAGGACATAACAAAGAAAT
GGAGCATAAACTGCCAGGTCCTGACTGTAGATTTGGATTCCCAAGTTGGTGTCTTGTCACCCCTTGTIAC
TCTTCTAAAGTTATGATCTTTTCTTGTGCATAGGAATTCATAGTGATTTCCCATCACCCCTTGGGATT
ATCATAGCTCCTTTAAGGTCCCTCTATGCACTCAATAACATCAACAGTAAGTGTCTTCGAGCACTTA
CTGAGTGATATCATTTGTGTTCTCAGCAGCACCCACAGATCTCACCAGAACCTTAGCTGAAGCCCTGTA
GAATGAATAGGTAAGTACTGCCATGCCAATCTGGAGTACTCAAGCGATGCAAAATGATTCCTTTAATTGT
ACTTTTGCAGGCTTGTGAGTTTGTCTCATGGAGAAAGTGGCTACTGTCATCCATGTTATATCTATGTAATG
TTGGACTGCGAAGCATCACTTGACTTTTCCAAAGCAGAAATTAACAGCTGATGACAAAGCTGCTGCTGAGA
AAATGGATATTTTCTGAATTCAGTTCTACGTGGAAACAGCTGACTAGTTTCCATTGCTGTAAAGATGGC
TCTTTTGTCTTGGTTGATTTTGAATATGGCTTTACTTCTGTAGAAAGGAGATTTTCATTTGAAGTCCA
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FIG. 16A(14)



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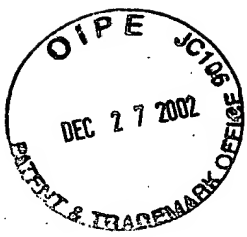
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CTCAGGGATTTGGTTCAACAACTGGAGTACAGGTTTCAGAAAAATATCTCTTTAATCCTCCAATAATAA
ATTTTCTCATCTATAATTCTCGAACACTTTCATCCTTTGCAGCCGAGCATATAGATAGATTGTTGTGCTC
ACTGTGTTCTGATTGCCACTTTGACCTGCTTTTCAACTTAGGTTACAAATAGAACAGAAATCTCTCTGA
TTTTTCTCATTAATTGTTGAATTCACACTTTTCCCTCATTAGCAAGAAGTCCAGTATCTTCCCTGAGAAC
TTCCTTTTCTCAATCTAGGAACCTTACTTGGTCCATAAGGTAAACAGTCTTATTTCTGACTATCAAGGAGA
GAAATAACAGGAGCCATTATCATCTTTCATGGTGTCACTTTTGAAAACTGGTCTCTGTAGATCTTTCAGA
TTCTTGCGTTAGTCCATTGCTATGAACAAATTCATAGACAGCATGGCTTATAAATAACAGAAA
TGTAATTTCTGACAGTTCTGAAGGCTAGAAAGTCAAAGATTAAAGACACTGGCTGATTTGGTGTCTGGCGA
AGGCCCATTTGCTCATAGATGGACGATGACCTTTTCACTGTCTGCACATGGCAGAGGGCAAGAGAGC
TCTCTGGGTCTTTTATAAGGCACTAATCTCATTTTGGAGGACCTTGCCCCCATGACTTAATCACCT
CCCAAGGCACTGTCTCCAATACCATCACCTTGAGGTTAGGATTTCAACATATGATTTTGGGGGAC
AGAAACACGAGTCCATCTCGCTTGTCCACTCCATGGTGGTATCTTGTCTGGATCAGTTTCTCTCTTG
GGTGCAATTTGTGTTCCATGTCTAACTTGCAAGTTATAGCAGGCCCGATAGCAAAGTATTCCAATGTTGG
TATGCAGAGGCATTGAATAATCAGAAATGAACCCACGCCATAAACAACACTGGTAGAGCTGCAGAGAGTACC
AGCTGATTATAGCCCTGGGTAACAGTGGTTTTTTAGTTCCCTATGTCCGTGAGCCCTTTTCTCCCATAGT
AGCCCCACTGTGTTGAAGTGGCTGAATCGACAGAAAGCTTCCAGCTTGGGCCACATGCTCATGGAACCAA
TTCTCCTTATGAGCCGTACAGAGCTGGGTTGCCATTCTGGATAACCCTCTTCTTCAAGAGATTTTATTT
TCAAGGATATTTTCTTTTATCAACTACAGGGGATTTATTTAGAAATCTTAGGGCAGTGGTGCCCAACCTT
TTTGGCCCCAGGACAGGTTTTGTGGGAGACAAATTTTCCATGGACCAGTGTGAGGGGCTGGGAGGCA
TGGTTTTGGGATGAGTCAAGTACATTACGTTTGTGTATACCTTATTTCTATTATTTATATTTGTAAT
ATATAATGAAATAATTACACAACTCACCAATAATGTAGGAATCAGTGGGAGCCCTAAAGTTTGTCTTCCCT
GCAACTAGACAGTCCCATCTGGGGCAATGGAGATAGTGACAGATCATCAAGCATTAGATTCTCATAA
GGAGTGTCTAGATCCCGGATGTGCAGTTCACAATAGGATTTGCTCACCTATGAGAACTAAT
GCCACTGCTGATCTGACAGGAGGTGGAGCTCGGGCAGTAATCGAGGGTTGGGAGCAGCTGTCAATAT
AGATGAAGCTTTGCTCGCTCGCTGCCACTCACCTCCTGTGTGTGTCCACTTCCCTAACAGGTACACAG
ACTGGTACTGGTCCATGGCCAGGGAGTTGGACCCCTGTCTTAGGGAGTAGGGGTGGAGTTCCCTTCACT
TCTAGAAGGCCCTGGATTAGTATCCAGAGCTGTCTATTACAGAGTATCACAACCAGGTGGCTAAAAAC
AGACATGAATTTCTCTTATTTTGTATGGCTTGGAAAGTCCAAAGTCAAGGTGCTGCCAGGGCCATGCTC
CCTCTGAAATGTAGGGGAGAAATCCTTCTCTCTCTCTTCTAGCTTCTGGTGGTTTGTGGCAATCACT
GGCATCGCTTGGCTTGCAGCACTTCAACATCTGCCCTTTACTGTCTCATAGTGTCTCTCCCTCATGTCTC
CAGGTCTCTCTCTCTCTTTGTATAAGGAACTAGTCATATTGGATTAAAGGGCCCAACCTACTCT
AGTATGACCTCATCTTAAGGTCACATGCAATGACTATTTCCAGATAAGGTACATTTCTGAAGAAGTGGGA

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FIG. 16A(15)

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GTTAGGACTTCATATCTTTTGAAGGAACACAGTTCAACCAATAACAGCCCCCTGTACTGTTTACAAATA
GGTATTCCTCTCCTTCCCAAGTTCTTCATAGCAGAGACAACTGTACCAAAAGGCAAAATACCTTATT
ATGTAACCTTAACCTAGGATCATAGATCCCTACTTGTCTGGTCTTTTATAAGCCACAGAACCCCGG
GAAATCATTTAAGACAAAGGAAGGCCAAGTGCAGTGGTTCATGCCTGTAATCCCAGCACTTTGGGAA
ATTAGGCGAGTGGATCACCTGAAGTCAAGAGTTTGAGACCACAACTGACCAGCATGACAGAACCCCATC
TTTACTAAAAATACAAAAATTAGTTGGCATGGTGGCATGTGCCTGTAATCCAGCTACTCAAAAGACT
GAGGCAGGAAAAATCACTTGAACCGAGGATGCCAAGATAGCAGTGAGCCAAATATCGTGCCACTGCACCTC
AGTCTGGATGATAGAGCAAGATCCTGTCTCAAAAAATTAATAATAATAAAGACAAGGAAAGCCTT
TTCCAAGGAGACCTTCTGCTTTGCTAGTTTCAGAGAACTTCTTTGGAGAAAAACAACACCCAGTCCA
TTAGCAGCAACGTCAGGGATTGAATTCTTAGGCGACGAGGCTGGGCACAGTGGCTCATGCCGTGTAATCC
CAGTACTTTGGAGGCTGAGATGGGTGGATCACTTGACATCAGGTGTTGAGACCAAGCTGGCCAAACAT
GGTGAAAACTCATCTACAAAAAATATGAAAAAATAAAGCTGGGTGTGTTGGCTTATGCCCTGTA
GTCTCAGCTACCTGGGAGGCTGAAGCAGGAGATCACTTGAACCCGGGAGTTGGAGTTGCAGTGAGCT
GAGATTGCCCCTACTGTACTCCAACCTGGGTGACAGAGAGACTCCATCTCAAAAAATAAAGAAATTCT
TCGGCAGCAGTCTTCCCTCCACCTCATAGACCATGGAGGTGAGCCAGCTCTGACAAACCATGAGAAACA
ATGGCAGAGACATACCTGTAACTGACTGGGCAAGACAAAGGTGAGGAAAAATGACAAGTTTGA
GGAATATGAGACCAGGAGTGGGAACACCACTAGCAGAAATGATGGAAGTTCTCAAGAATAACAACA
GAGAAATAGACCATGGCCAGAGTCTAGAACCTCCAGGGAAGAGATGGGTCCAGAGGCGAGAGAGG
ACGTTGAAGGGAATGGGAGTGGTGAAATATATAGACGATGGGACCAACCCAGAGCAGTCGCTATTG
CAAACTGAGGAGAGGAGAGTCTGGAGGGGTGGTGGGAAGCTGGGTCTCCTAAGGAGGTTTGGACAA
AAGCAGTCATGGAGCGGCTTAGAAATCACAGTTGGGACAGGTAAAGTTCTCGGGATATAGAGGAT
GAGATTAGAAGAGGTTCCAACTAGGAGTGTGGAGAAAGCACTATTGACCCAAAAGGAAGGAGAAAT
GTGGGTGGAAGTGGCAGAGAAAGAGGGGTTTGAGCAGAGAGTGGTGATTTTCTAATGCAGAGTTGTGG
GAGGTGGAGTGCAGGAGCCAGGCTGGGTGGCTGTGATGTGATTAAGCACTTACTGACTGCCAGGC
AATGGGCTAAGTACCTGAGATGCTTTGTCTGTTATCCCTCCGAAACCCCTCTGAGCAGGTGCAGTTAT
TATTCTCACTTCACAGATAAGGAAATTGAGGCACAGAGAATTGAGTAACCTACCCAAAGGTGACATAGCT
CATATATGTTAAAGCAGGCTTTGAACTCAGTCTAGCTCCCGAACCTAAGCTTGTAACTACTATGCTTTT
CCCCAAAAAGGGGCTGGCACAAAAAGAGCTGAGGGGGCTGGGCATGGTGGCTCATGCTGTAAATCC
CAGCACTTCGGGAGACTGAGGCAGGTGGTTCAACAGAGGTCAGGAGTTTCAGACCCAGCCTGGTCAACAT
GGTGAAGCCCTGTCTCTACTAAAAATACAAAAATTAGCTGGGTGTGGTGTGACCTGTAGTCCCAG
CTACTTTGGGAGGCTGAGGCAGGAGAAATCGCTTGAACCCAGAGCGGATGTTGTAGTGAGCCAAAGATC

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FIG. 16A(16)

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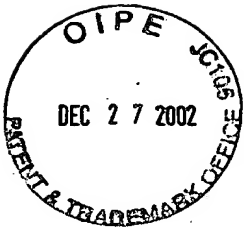
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GCCTTTGCTTCTCCTTCTGAGTTCTTATCATCTTTGAAGTTATGTTCATGCTGACTTCAAATCACTTT
TAAATATTATGGCCCTTCTTAAATGTAGTTCTGAAGTGAGGGCTTTATCTTTCTTTGCTCCAG
ATTTTCTACCGCGTCATTACCAAGCATCTTAAACAACAACTTAAACAAAAATCTTCTTGACCTG
GTTTTCCCACTAGCTAACATCCTATTTTATCTTTCCCTTTGCACATAAAGGTTTTTAAACGGATCTTT
ATACCCCTGTCTCCATTTTCTCATCTGCTAACTTATATGGCAAAGATTACCACTGCCTTTCAACATAA
TTGGCCCAATCTACAGAAAGTTTCAAGTTCTCTTTTAAATTGACCACCTCTGCTGCTACCTCCCCACCTT
TGACATCTTGCTTCTCACTTGGCACCTTACCCAGTGTCAAGATTCCCTCCCTTAGGATGTCTTCAGAG
CAGCTACACAGTTGGTACTATAATTTATACATCCTTGACACAGGGCTTGCTGGGATATTGATGGAGAG
AAGGAGGAAACTGGAAGTAGTTCAAGGCCAGAGCTAGGGAATTGACCCATCTCCAGGTCTCAGGTCTGC
AAGGGAGCTCACAGCTTAACACATGGAGCTAGAACTTGTGCTGGACCTTGACCAACACAGCCCAT
GGAGTCCAATACAGTGCTCAATAGGGATTTCAGGAAATTGCTATATTTATTCAAAGAGAACTTACCAA
GTGTCAGCTACGTGTTGGCATTTGTTAGGCACAGGGACCACAAAGATAAGACATTTGAGCTTTCCCTT
AAGTTGCTCACTGAGTAAATAGAGACAGACAGAAAGGTAAACAGGTAAGTGCATAAATACATACTCTG
CAATAGTTTCATAGTGGCTATGGAGAGAACGCTCACTAATTTGTTTAAACAGTTGTTCTTCAAGGA
TTTGACATGGATTGATTGGAAGCATGATACCATTTTTGCAATTAACACACAGGAATACATAAATAA
AATGCATCAGTATTTTACAAATAGCTACTAAGAGCTACTAGAAAACCTGGGAATCTTAAACCTTA
CCATGCTACTTGCTCTAAATATTTTATTTTATGTTATTTGTACATTTCTTTACCTACACAAACCCA
CTGTTTCTTCTTCTAGTCTATTTAAACCTCACACCTTTTACAGCATCTCTTAATTTTACTACCA
TCTGTTAGTTCTCCTGTCTGAATGAAACAAAAATGGCAGATGTAAACGAGGGCGAACAGATTTTIG
ACAGGAAGTATTCAGAGGTAGAAGGAAATAGTCAAGACACATATGATAAACGAAAAACAATAACTTT
ATACATAACAACCTTATAGACACATTTAAAGTTTAAAGATCTCAAGAGCTATGTCTGAATAGATAGAAG
TAAAAACTCTATTAAGTAATTAGGAAAAATAACAAGAACAGTGAATTTCTTAATGAATGGCATGTAATCA
AACTGTACTTATCGTCTAATTCATAATCTTGAATGTTTTTATTTTATTTTATTTTATTTTATTTT
GAGACAGAGTCTTGCTCTGCACCCAGGCTAGAGTACAGTGGCGTATCTCAGCTCACTGCAACCTCCA
CCTCCAGGTTCAAGCGATTCTGCTGCCTCAGCCTCCTGAGTAGCTGGGATTAACAGAGGCTGCCACTG
CACCCGGCTAATTTCTGTATTTTAGTAGAGATGGGTTTCAACCATCTTGCCAGGCTGGTCTTGAACCT
CCTGACCTCATGATCCACCGCTTGGCCTCCCAAAGTCTGGGATTACAGGCGTGAGCCACCCACGCTT
GGTCGAATGTTTTTATTATTGAAGAGACAACATGGGCCTTAAATCTGTCTTCTATTGACAGACTTTG
ATGGAGTCAAAATCCCAATGCTGCCACTTACTGAACGGCCTTAAATGACTTAGTCTCTCAGCTGTCTT
TCTGCATATGTAAGGTGGAATAATGATGGCTTCAAGGAGGAATAAACCTATGAAAAGTGTGAGGATAG

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FIG. 16A(18)

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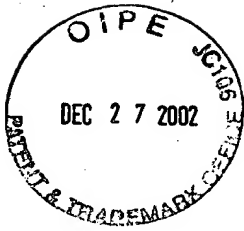
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CTATTTAATAAATAATTTAAATACTAATACTAAATATTAAAGAGCTTTGAAATGGCCAGCGCAG
TAGCTCCCTGCCTGTAATCCCAACACTTTGGGAGGCCAAGTGGCGGATCACCTGAGGTACAGGATTTA
AGACCAGCCTGGCCAAACATGTTGAAACCTGTCTCTACTAATAAACGCAAAATTAGCCAGGTGGTGG
CATGCACCTGTAGTCCCAACTACTCAGGAGGTTGAGGAGGAGAATTGCTTGAACCTAGGAGCTGGAGG
TTGCAGTGACCCGAGATGTCACCTGCACCTCCAGCCTGGCAACAGACAGCAAGACTCCATAAGACAAACAAA
GCTTTGAAATTGTAAATGAGTTGTACCTATCTTCATTTAAGAAATTCATCTTTGTTTCATCTATTTT
ACTTGACATGAGAGCTTCCAGCAATTTTAATTAAGCCCTCACAGATTTTATGTCACCTGGCTATGTGAT
AAACAAATTTTGTCTAAATAATATTCTTGCTTCTTTTAAAGGAATTGTCTCCCTAGAAACGGTTTG
TACCAACAAATACACTGACTTTACACAAATCAGATCTGATTGGCAACAGTTGCAGATGTTTTCAAAGG
ATTTTCATTTGAGAAAGGGCCCATTTGGGTTATTAGATTCTAAGAACTGAAACTGCTTTGTTCTGTTT
TTCTGGCTTCTGGAGAGGAGAGACATGAATTCAAGTAGCACCTTGATTTTCTTTATCCTTCATTT
CAATACAGAGATGCTTCATATGCACAGTGGTGTACAGTCACATCAAAAGAAAGAGAAACAGTTTCTTG
GTTTTTAATTTCAACCGGAAAGGAAGGCCACCCATTTGTTCCGCTCTAATTAGCCAGTGATGACTT
AGAGCAGGAGATGCTTTGAAGCGTGGTAACACAGGTCTTCATTAATCTCCACGAGGACTTGCAC
TTCTACTATGCCTAGGCTGAAGAAATGGCTCAGGAAGATGAACAATCTCACAGAGCCCTAACATACTG
AAGCCAGGTGTTATAAGCACAAGTCAAGAGGTGAGAAACTAACGTTCTTGAAATCTCCCACTTCTTT
CTACGTCAGAAAGCCAAAGCTGATTATTTTAGTTGGAATTTAGAAATTTTAAATAATTATCTAAAGTC
ATGAACAAGCCTAATTATAAGATAGTTGCTGTGAAGGTGCTGAAATAAATCGATTTTACCAACCCCT
CTTCTGGAGGAAGCCAGATGGAATCCTGTAGAATGTTCACTTACCAACGAACTCTTGTCTTTCTAAT
GAGGAACAGAGGCCACAGTAGTAACCTATCTTAACCAAGACAAATGACTAGTCTGCTGCTCCTTTT
ATTAAGCACTAAAATTTTGATCCAAATAAATCTGTCCAGTAGAAGGATTTCCCTAATGTACTGGTT
CTAACTTGTCCCTTCAAGGGCCAGTGTCCGTACACATAGCTAAATGGGACTTCTCTTCAACTACCA
TTACCCAGAGGCGAGAACCTAAAATGCTGTGAATGACATTTCTGCTGTTACATCTCAGCAGCAGTGTG
CATTTGAGCTTCTGCAGGGCCACCCAGGACCTATATCTGCTCAGATGTTTAACTCATCTAATTCAGTGA
ACACTTCATTTCTAGTTAACTGAACATCTACTTTGTACAAGGCACACAGCGGTTACAGAGATGAATAAAA
TCATGAGATTCCACTGTCTCTATATAAACCATCACTTTGGGAAATTTTAGAAATGTGGTAAGCTCCAGG
GCTTCCCTGCAGCGTAGAAGTCACAAACTCAATGCCTGCAGAGGCCAGCTGACAAACATAAGTAAATGA
TTCTGGCTGGCGGAAACAATTACGGGTGGTGGTTTCCAGCTGGGAGTGCACGCTGTGTTAAAG
GACAGCTGCTACTCATTTCCAGCCAACTGTGTTCCCATGTAGAACTGCGGCCAGTGTAGCCAGTACCG
AAGATTTCTCAGAAAAAGCCGGAGATCTCAATGTTAGTGAATAATCTCTCAAAATTTCCAAAGAGGATTAT

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FIG. 16A(19)

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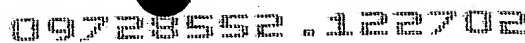
ATGGGGCAAAGGTTCTCAGATCAGTTTGCAGTCTCTTACTTAGCCCATGTGCAGAGCAGTCGTAGAGGG
TAGCATGCAGTGTCTACATAATAATCTTTTATTTATTTATTTATGCTTCTCCTTCTCTCTCTCTCT
TTAACCTTTCTTCTTCCCTCAGGCTGGCTTCTTCCCTCAGCTCGTCCGACCCAGCCTGGGTTCAATG
AACATTCGGTAAGGAACACGGGAATGTCAAGCGCATTAGAGACAACCTTGAGACACATTCCTCTTGCGG
TAAGCACTTCACTGTAGATTTTAAATTTAAACAAGACAATGTTTACGACTTGCTTCTTTCAGGGAAGA
GCGATATCAATTTTAGTGAACACTTCAAGGCTGAGATACGCTAGGAGAGTCGTGTGTTGCACAGCA
AAGAATTCACCTTTGAAGCGAGTGGGAAAAAAGCATCAATGCCACATGTAACCTACCGCTGAAGGG
TTACATTTGGTATGAAACCTGGGTTTAAAAAGGGACCGAATAGACTAGCCATTAAAAAGACCTGCGTACAA
CCTCTCTCTCTCTTTGAGAGATAATGTATCTGGACAATAAACATGAACAGAGTGGAGTCTATCCTGT
TTAAACATTTGCCCTACTGTACAGGCACCCAGGAGCTGAAGGTCAGAATATTAGCAGTGGGAGCTTGATT
AGAAGTTGATGAGAGATGGGTAGTAGGAGGAAGAGTGAGATAGAGGAAGAGACATGGGGTTACCCG
TAAGTGGAGAGTAGAAAAAGTAGAATCAGCTGGCCATCAAAGGGCTGGGACTGAGGAACAGTATGGCAT
GTATTAATATATAAGCGCTGACATTTGAGGAGAACTAGGAAGGTAAATGAAATCAATAGGGGATGAT
GGAGAAATAGTTAGGTGTGCAGGGATTAGGGTTATGATAGAAATACATGTGAATACATGCAGTATTGTCC
TGGAAAAATGGTTAACAGTTGGTTCTCTGGGGGTGAGGGGAAGCCCTGATTTGTAATATTGCTTATT
TCTGTGTGCAATACTCCACCATGACCACTTTCAAGCTATGAATGTGAATCACAAAAGCAGGTTGGG
AGGAGATGCGCACATTTGTTCCCGGCAAGGTGGAGGTAAAGGTGAAATCAACAAGGTCAAAGAA
AACTCAAGATTTTCGAGGTGCCTCAGGTCTGAGGGCAATGAAGTCTAGGAATGGCTGTGCTGAGGTAGC
TGAAATAGAAGTGACTGCAGAGGTGATGAAGCTGAAGAGGTGAAACAGAAATTAGAAAGGCAAAACCCC
CACGGCCCAACCCCTGCAGCCAGTTTCTGAGGGTGACAATAGAGGAAGGTTGGAGATGGAGT
TCAGGTCCAGAACCCATAGAACGGAGTGTGACATTTGCTCAAGGTCAAGCATGTGAGTGTGGGGTGT
CACATGCTGTTGTGAACCATCATTTATCAACCAATTTAGGAAGACCTCCTATGGGCATCTTGCCATATGC
ATTATAAGATGTGAAGAAAGACATTTCCCTCCACTTGGTGAGGAGAAATTAGGGCTGTACACAGATACT
GTAGAGTGCCATGTGCCTGGTACAGATAAGGTGTGTTAGAGGTTAAAAGATGAGGCTCTTAATATTAAAT
GATAGATCCCACTTACCTGAGTCTGACTTACAAATGTGCTAGCATTAAGTGTGTTTACCTGCATTCCTCTT
TGACCTTCAGAACAAACCCATTTTACAGATAGGAAATTTGGGTGAGAAAGTTTCAGTAACTTATCCAAAG
TCACACAAATTGGCAAGTCCAGAGCTGAGCCAGGAACCTGAGGTCCCTTCAACACCAACAGCTTGCTC
CCCAATCACTGTGCTATTTTCCCTCCCCAGAAAGATAATACTCTGATGGAATGAAGGATAGTGTAAATA
GGAGATTCGGTGTCTCTTTTAAAAAATAATTCAGCTTGCAATATCCCTAAAGAGTCAATTGATGTTTA
AAAAAATTTCCCTTGTGCTTGCAATGTGACATGTATTTTATAGGATCTGCTGTAGCAAGTGTATTTTG
TGTGATTGAGTGGGAGAGTGGGAAAAAGTTTTCAGAGAGCTGTTGAAGCCAGAAATGCAGGGGGCTGCGCA

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FIG. 16A(20)

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TTTTATCTGTGGCTTTCAGATGAGAACACTGGATGCTTATCTGAAAAAAGCTCCTCAGGCTGGAGGGAG
GGATTGGCTCTAAACAAGATGCAATGTGATAAGAAATAAAAGCGAAGCCAAACTCTAGGCCCAAAAGGCTCT
AGCAACACACTTTTGAGAACCTTGAGACGAGATTTTGGCTGATGCGAGCTTCTCCGCTGCTAAAGTAG
CCCATTCCAATTTGGACGGCTCTAGAGGCTGGCATGTTCTTCTCCACGTTGTGTTAATGTACTCCAGTTT
CTTCTGCCATGAACCTGGCATGCCCTGGCTCCTCCTACCTTCCCCACTTTAAAGTCTTCCCTCCCTCCTT
CTGACCTTCCCATTTCCAGCCACACTGGCCTTTTGTCTGGTCTTAACAAACCATGCGCTTTCCTGCCTCCA
AGCCCTACACCTGCTATCCATCCCTCTGTCTGAGAGACACTCCACCCCTTACAAAAGCCTGTTTCTCA
TCCTTCCAGTTCAGATGTCTTCTCAGCTTGCCTCAACTGACCTCTTTCAGCTATTCTCACTCTTTGTAC
TCTGTTCAATTTCCCTGGCAGTCACCATTAATTTATCTTTATTTGAATCAATTTCTTAGTTGTATTAT
TTAGTTATTTGACACACTCTGTCTCTGTGCTTCTTATTCACCTGACGGCTTCTTATGTAAGTAATT
TATTTACTTAAATTTTAAAAATAATTTCAACTTTTGGCCGGGCACAGTGGCTCACGCCCTGTAATCCCCA
GCACCTTTGGGAGGCCGAGGTGGTAGATCAGCTGAGGTGAGGATTCGAGACCCAGCCTGGCCCAACA*GG
TGAAATCCCATCTCTATTTAAAAATACAAAACACTAGCCGGGCTGGTGTATGCACCTGTAATCCCAGCT
ACTCGGAGGTTGAGGGAGGAGAAATCACTTGAACCGGGGAGGTGGAGGTGCAGTGAGCTGAGATCACG
CCATTGCACCTCCAGCCTGGGCACGAGAGTGAGACTTCACTCTCAAAAAAACAACAAAAACCCCT
GCTTTTCAGAGGGGCTGAACATAATTACATTCTCACCAATAGTGATAGCATTTCCCTTTCTCTACAG
CCTCACTAGCATTTACTTTTTTAAAAAACTTTTTTAATAATAGCCATTCTGACTGGTATGAGATGGTATC
TCCTTGTGGTTTTCACTTGCATTTCTCTGATGATTAGTGATATTGAGCATTTTATTATGTTGTTGGCT
GTTCTGATGTCTTCTTTTGAGAAAGTGCTTTTTCATATATTCTGCCCATTTTGTGAATGGAGTTGTTTG
TGCTTGTGAATTAAGTTCCTTATAGATTCTAGATATTAGACTTTTGTGGATGCATAGTTTGTGAATA
TTTTCTCCCATCCTATAGTTCTGTCTTACTCTGTGTATAGTTCCTGTTTTGTTATGTTTTTGTG
TGACAGAAGCTGTTTAATCTAATTGGTCCCACCTGTCAATTTTGTGTTTGTGCAATGGCTTTTGAA
TTTTAATAATAAATCTTTTCCTAAGGCTGATGCCAGAACAGCATTTTCTAGGTTTCTCTAGGATTC
TTATAGTTCAAAAGCTTATATTAAAGCTTTTAAATCCACCTCAAAGTTAATTTTATATATAGTGAATGC
AGGGTCCCTGTTTCATTTCTTTTGCAATGTGGCCAGCCAGCAATCCAGAACCATTTATTGAATAAGGAAT
CTTTTCCCTCATTTGCTTATTTGTCAACTTTGTCAAAGATCGGATGACTGTAGGAGTGTGGCTTTTCTG
GGTTATCTACTCTGTTACATTGGTCTATGTGCTGTTTTTGTATCAGTATCATGCTGTTTTTGTACTA
TGGTCTCATAACATAGTTTAAAGTTGGATAATGTTATGCCCTGCTTTGCTGTTTTGCTTAAGATTGC
TTTGGCTATTGAGGCTCTTTTTTCACTTCATATGAATTTTAGAATAGTTTTTCTAATCTTTGAAAAA
TGACCTTGGCAGTTTGATAGGAATAGCATTGAATCTATAGATTGCTTTGGGCAGTATGCTATTTAATG
ATATTGATTCTTCTATCCATGAGCATGGAATAATTTTCCATTGTTTGTGTCATCTACTATTTCCCTT

FIG. 16A(23)



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AGCAATGTTTTTTAGTTTTCCCTGTAGAGATCCTCCTAGGTATTTTCATTTTTTATGTGACTATTTTAAAT
TGGGATTGCATTTCTTCATGTGGCTCTCAGCTTGAATGTTATTTGGTGATAGAAATGCTACAGAGTTTGT
TACACTGATTTCTGTATCCTGAAACCTTACTGAATCATTTATCAGTTCTAGGAGCCTTTGGCAAAGTCT
GTAGTGTTTTTCTAGGTATAGAATCATATCATTAGCAAAGAAAGATAGTTTGACTTCTTCTTTTCCCTATT
TGAATGCCCTTTTATTTCTTTCCCTGTCTGATTTGCTCTTCCAGTACTAGCTTGAATAGGAGTGTGAGA
GTGAGCATCCTTGTCTTTGTTCCACCTCTCAAGGGAAATGGTTCCAGCTTTTGGCCCATTTCAATATGATGT
TGGCCATGGGTTTGTACAGATGGCTCTTATTTATTTGAGGTGATTTCCCTTGTGATGCCCTAGTTTGTCAA
AGGCTTTATCATGAAGGGATGTTGGATTTTATGAAGCTTTTCTGGTCTTATTTGGTGAATTGCA
TTTATTGAATTTGTGCATGTTGAGCCAACTTCCATCCAGGGATTAAACCTACTTAATCATGGTGTAA
CTTTTGTGATGTGCTGCTGGATTTGGTTGCTAAATTTTTTTTTTTTTTAAATGGATTCTCCCTCTGT
CCCCAGGCTGGATTGCAGTGGTGTGATCTTGGCTCACTGCAAGCTCCACCTCCCGATTTCATGCCCAT
CTCCTGCCCTCAGCCTCCCGATTAGCTGGGACTACAGGCACCCGCTACCATACCCAGCTAATTTTGTAT
TTTTTAGTAAACAGGATTTCCACCATGTTAGCCAGGATGGTCTTGATCTCCTGACCTCGTATCTGCC
TGCCCTCAGCCTCCCAAAGTGGCTAGTATTTTTTTTAAATTAATTTTCTCACCCTTGCTGCCATCTTA
TGATTTTCTAGTATTTTGTGAAGATTTTGTGCATCTATTTTTCATCAGGGATATTGGCCTGTAATTTTCT
TTTTTCATTTTCATCTTTACCACATTTTGTATCAGGTTTCATCTGGCTTCATAGAAATGAGTTCAGGAAT
GGTCCCTCCTCCTCGAATTTTCTCTGTAGAATTAGTACCAGCTCTTGTGTCTGGGAGAAATTTGTAT
GCCAATAATTTAAATGCAGTTAATATTACTGGACAATTTCTCCAGATAATTGTATATGATTTTGTGT
CCACCTGAGTTGATACATGATTTTAAATTTGATCATGTTATGAAAGAGCAAGAGTATTTGGTCACCT
AGTCTTGCCCTATAGATGTGCCTAATGATTCAAAGTAGATATTTTGGAGCCTAACAGGTGCCGTGACTA
GGCAGTTTTTTTTTTTTTTTGGACAGAGTCTCGTTATGCTGCCCCAGGCTGGAGTGCAGTGGCA
TGATCTCGGCTCACTGCAACATCCGCCCTCCTGGTTCAAGCAATTTACTGCTCAGCCTCCCCAGTAG
CTGGACTACAGGCTCAGGCCACCCAGCCTGGCTAATTTTGTATTTTGTAGTAGAGATGGGTTTTCACC
ATATTGGCCAGGCTGGTGTGAATCCTGGCTCATGATCCACCCGCTCGGCTCCCAATGTGCTGGG
CTTACAGGCGTGAGCCACCCGAGATTTAGGCAATTTTATATTTCCCAATATCCAACTCTTCTGA
CCCCCTTCTCAGCCTGGTGTATCAGGCACAGGCTGTTGAGATTATGTGGTCTCTGAAGATATGGC
TCTCCAGGTTGACAATGTGATAAGGATTCACCTGGTTTAGGATTTACACATTCGCCCTGAATGTCTG
TTGCATCAAGTAGACAGTCCATCCCACTTGGCCATTTGGTCAGAGCTGAAGGAGACAAAGGAGTGGG
CAGCCGCTGCTGTGAATGCTTGGACAAAGACTGCCAATAGCTATCAGACAGTGTAAACACAGCTGA
TTTAGGTTTGAAGGGGCGAGTCTCTTGGGCCACTTACTATGCTGCATCATCTCTTTGGAAATGCTCT
TCAGGTAACCTGCCCTAACAGACTGAGAAATAATAATGCTCACAGAGAAAAAGACCCCGAAAGTCTGACT

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X

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FIG. 16A(24)



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TCTCAGAGCTCAGTGTAGGTGCAGAACTGGATTGTGAAAGGATTTTAAATTTTTTATATTCATTGC
AGGGAACATTCAATTATCCATCCTTCTCCACTCCACCTGTCTGTGTTGTCTTTGTCTCTCTCCC
CACCTCTCTCTAGAC
AC
GAGAGAAAAGCCTCAATCTGAGGAAGCTGTGCTGACTAGCCTTGTCTTAATCATGGAGACAAATGCTTT
ATGCCTTTATCTTTGCACAGCTGAAAGCCATGGCAGAAGCAGTCCCTAAACGAAATAAAATAGAAAGG
TTCCCTGCTAAGCCCTGGCAATGCAGCCTTCTATCCCTCCCCAACACTCACAGCTTCTGAGCAAGATG
TAGCTGCCCTCCAGGAGGCTGGTGATGGGCAATAATGAGCAGAGCCACGTGAAGGAAAGATGGGTGAA
GAAATGTGTGTGAGGTCATGCTGGCTGCACTGACCATGAAACAAAGGATCTACCCCTCTAGTAACCTGC
CCTACTCCTTTGGTAACTGTTCTGAAATTATAACTTGCCAGAAGTTCAGAAGGACCTAGTGCAGGTATT
AGAGGAAATTCGTAAGATTGAGCCATTATTCTCTGCACAGATACATAATAATGGACACGGGCCATGGTG
GCCAGCATTTCTGCTCTTGACAAATGGTGAAGGAGGTTGTAGGTCAATGGCTATGCTCTCAGAAATTAT
AATGGAAAGAAACAGCTCCTGAGTGTACTATGAGCCAAAGGCTGTGCTAAACACTTTACCATAATGAT
GACATCTTTTCTCACAGGTATCAAAAAACAATAGGACATACCGGATAGCTACAATCTTTGGGCCCCCTG
CAACACACAATAATGTGTATTCTTCTTCAATCCTACATATTGCTACAACTGTATCCCTGAGGCATA
TTCATTGTAAATAAACAATATAAAGTACTACTTTTGTTTTGTAGATGGAGTCTCGCTCTGTCAACC
AGACTGGAGTGCAATAGCATGATCGTGGCTCACTGCAACCCCTGCTCCTGGGCTCAAGTGATTCTCCT
GACTCAGCCTCTCAAGTAGCTGGGATTACAGGGCAGCCCCCATGCCCTGGCTAATTTTGTACTTTTA
ATAGAGACCAGGTTTCAACCATGTTGGCCAGGCTGGTCTCAAACTCCTGACCTCAAGTGATCCACCTGCC
TCGGCCCTTCCAAAGTGCTGGCATTACAGATGTGAGCCACTGCAACCCGCCCATATAAAGTACTACTAAT
GTAACAGGCTGTAGTCCAGACAGTACCACACAGTGGTGTTCATTGAAGGCTGGACTAACAACTCCAGC
CTCTCCGCCATCACAGAGTGATGACTGCCCTTCCCTGAAGCAAAAGCTTCTGGTTCAAGGAAAGGCCAGTA
AGTGACTGCTCTTTGTGTATACATGTTAGATGATCAGGCCCTCAAGAAAGTATAAAGAGATCTTTGTG
CTCTCTGGGACTCAAAAAGCTGCACCTTTTGGGGAAGGATAGCCAGGTAAAAGTGGCCAGGTAAAAGA
GGGCCCTGGTACACCTGGTTCTGCAAGATGGTAGACACAAAAATGAGAGCCACATTTGGAGCTTATGTGC
CCCTAACTCTGTACATAACCTGCAAGATCTAATTACTAACAACTGGAATCTTGGAAACACCTGTAGTAC
ATCCTTGGCTAAGGTTAGCCCCAACAGAGAGGCTCTCCTCTTACAGAGAACCATTAACATTTGTGCCCTT
CATCCTAGAGTAGAAAAGGCATGATCAGACTACTAAAAAGACATCAGGAAAAGGCCCTGTGACATCTGAG
GGAAGTGGTTGCCCTCTCTGGGATGTTGGTTCCGGAAGAGGGGCCATGGAGGAGTGCCCTTTAGATGG
TCATTTCAGGAACCCAGGCTGATAGTGAGAGGTGAAGCCAGCTGGGCTTCTGGGCTAGGGGGGACTTGGG
GAACTTTTGTGTAGCTAAAGGATTGTAATGACCAATCAGCACTCTGTAAATGGACCAATCAGCA
CTCTGTAAATGGACCAATCAGCAGGATGTGGCAGGGCCAAATAAGGGAATAAAAGCTGGCCACCAGA

Y

FIG. 16A(25)



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Y
GCCAGCAGTGGCAAACCTGCTCAGGTCCCCTTCCACGGCTGTGGAAAGCTTTGTTCTTTTGGCTCTTCACAAAT
AAATCTTGCTGCTGCTCACTCTTTGGGTCTGCACTATCTTTATGAGCTGTAAACACTCACCGTGAGGGTC
TGTGGCTTCATTCCCTGAAGTCAGTGAGACCACAAACCCACTGGGAGGAACAACAACACTCTGGACACGCC
AACTTTAAGAGCTGTAAACATTCACTGCGAAGGTCTGGGGCTTCACTCTGAAGTCAGCGAGACTATGAA
CCCAGTGAAGGAAGAACTCCAGACACATCTGAACATCTGAAGGAAGAACTCCAGACACACCATCTT
TAAGAGCTGTAAACACTCACTGCAAGGGTCTGCGGCTTCACTTTTGAAGTCAGCAAGACCAAGAACCCAC
TGGAAAGAAACAATTCGGACACATTTTGGTGACCCAGATGGGACTATCACCAAGTGTGAGTACCATC
AACCCCTTTCACCTTGTTATTCTGTCTATTTTCTTAGAATTCGGGGCTAAATATTGGGCACCTGTC
AGCCAGTTAAAGCGACTAGCATGGCTGCCAGACTTAAGAGACTAAAGACACGGGTGTAGACTTTCTG
GGAAGGGCTCTTAATAACCCCAACTCTTTGGAGTTGGGAGCGTTGGTTGCTTGGAAACCAAGCTTCC
ACATTTCTGTACTTCTGGCTGAGACGAGGTCAACAGAGAGGAAGCCATTAGCTCTGGGGTCCCCG
ACAGCAAGTTGGTTGACCTGTGGCCATGAACAGAACTCTCGAAGTCATGTTGCCCCAAGCGAGACTCAC
CCATCTATCCTATCTATCCTGACTCTTGCTTCTTGGTCTTAATGCTGGAAGACAAAACTTCTCTTG
TCTCTGTTCTCCAGGCTAGTCCCACTTCTAAAAACCACTCCCTGCTCTGCTGCTTTCTAGTTTCTC
CTATAAGAAATGATTCTAGTATAAACTCCAGGACTCTATTCTCTTTTAGGCACCCGGGCTCACCAAT
CAGAAAGCCATAATTTTGGCCAAAGCCCCATCTTAGGGGGGACTATCTGGAATTTTAGGATCCCCTCT
CAGACAAGCAGGCCCTAACAAAGCTATTCTGAAGCTAGGATATGGGAGCCTCAGAAATGATATCCTT
CCTATTCAAGTGAGGACAAAAGGCATCACTCTTCCAATTCTGGAATCCCTTCCCTCCCTCAGGGTATG
GCCCTCCACTTCACTTTTGGGGCATAAAGTCTTTATAGGACACGGGTAAAGTCCCAATGCTAACAGGAG
AATGTTTAGGACTCTAACAGGTTTCAAGAAATGTGTCGGTAAGGGCCACTAAATCCGATTTTCTCAGT
CCTCTTTGTGGTCTAGGAGGACAGGTAAGGTGTCAGGTTTTCAAAAATGTGTTGGTAAGGGCCACTAAA
TCTGACATTCTCTGCTCCTTGTGGTCTAGGAGGAATACTAGTGTCTGCTGCTGCATCAGTGAGC
GCAACTATTCCAATCAACAGGGTCCAGGGACCATGTGGGTCTTGGGCAAGAGGTGTTCTGCTGCTG
CATTGGTGGGCTCAACTATTCCAATCAGCAGGGTCCAGTGACCTTTGCGGGTCTTGGGTGCGGGGTG
GGGGGAACAAACAGACCAAAACTGGGGCAGTTTGTCTTTCAGATGGGAAACACTCAGGCACCAACAG
GCTCACCCCTTGAAATGTATCCTAAGCCATTGGGACTAATTTGACCCCGCAACCCCTGAAAGAGAGTGGCT
CATTTTATTCTGCACTATGGCCTGCTCCCAATATTCTCTCTGATGGGAAATAATGGCCACCTGAAGG
AAGTATAAATTACAATACTATCCTGCAGCTTGACCTTTTCTGTAGAAGGAAGCAAAATGGAGTGAAAT
ACCTTATGTCCAAACTTTCTTTTCATTAAAGGAAATAACCAACTATGCAAAACTTACAAATTCACATCC
CACAAAGGAGCCTCTCAGCTTACCCCATATCATAGCTTCCCTATAGCTCCCTTCTCTATTAATGATAA
GCCTCCTTAATCTCCCCCAGAGGAAACAAGCAAGAAATCTCCAAGGACCACAAAAACCCCTG

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FIG. 16A(26)



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GGTATCGGTTATGTCCCTTCAAGCTGTAGCGGGGGAGGGAATTTGGCCCAACCCAGGTACATGTCC
CCTTCTCCCTCTCTGATTTAAAGCAGATCAAGGCAGACCAGGGGAAGCTTTTCAGATGATCCTGTAGTAGGT
ATACAGATGTCTACAGGGTCTAGGGCAACCTTCAATCTCACTTGGAGAGATGTCTATGTTAGTAG
ATCAAAACCTTGGCTTTAATTTAAAGAAATGTGGCTTTAGCCACAGCCCGAGAGTTTGGAGATACCTGGT
ATCTTAGTCAAAGTAAATGATAGAAATGACAGCTGGGAAAGGGACAAAGTCTCTCCCGGTCAAGCAAGCCA
TCCCTAGTGTGGATCCCACTGGGACCTAGACTCAGATCATTTGGGACTGGAGTGCAGCAACATCTGTTGA
CCTGTGTTCTAGAAAGACTAAGGAGAAATAGGAAAGAGCCCTATGAATTTATCAATGATGTCCACCATAA
CTCAGGAAAGGAAAGTCTTGGCTTCCCTTGGAGTGGCTACAGGGAGGCCCTTAAGGAAATATAACT
CCCCTGTCACCCCAACTCACTTCAAGGGTTAATTTGATTCTAAAGATATGTTTATTACTCAATCAGCTGC
AGATATCAGGAGAAAGCTCCAAAGCAAGCCCTTGGCCCTGAACAAATCTGGAGGCAATTTATAACCT
GGCAACCTTGGTGTCTATAATAGGGCCCAAGAGGAGCAGGCCAAATGGAAAGCGAGATAAGAGAAA
GGCCACAGCCTTAGTCATGGCCCTCAGACAAACAAACCTTGGTGGTTCAGAGAGGACAGAAAATGGAGC
AGGCCAATCACCCAGTAGGGCTTGTGTGAGTGTGGTTTGAAGGACAGTTTAAAAAAGATTGTCTCTAT
GAGAAACAAGCTGCCCCCTCACCCATGTCCACTATGCTGAAGCAATCACTGGAAGCCACACTGCCCCAA
AGGACAAAGATTATCTGGCCAGAGCCCCCAAGCAGATGATCCAACACAGGACTGAGGGTCTCAGG
GTTAGCGCCAGCTCATGTCAACCCCTCACTGAGCCCTGGGTACATTTAACCATTTAGGGCCAGGAAAT
TGACTTCCCTACTGGACACTGGTGGGCTTTCTCAGTGTAACTTCCCTGCTGGACAGCTGTCTCAAG
GTCTGTTACCATCCGAGGAATCCTGGGACAGCCCTATATCCAGGTATTTCTCCACCTCCTCAGTTGTAA
CTGGGAGACTTTGCTACAGATAGTAAGTATGCTTACCTAATCCTACATGCCCATGCTGCCGATATGGAAA
GAAAGGGAATTCCTAACTTCTGGGTGAACCCCCATTAATATCAAGGAAACTATGGAGTTATTGCAC
ACAGTGCAAAAACCCAGGAGGTGGCGGTCTTACATTTGCCGAAGCCATCAAAAGGGGAAGGAGAGGGA
GAAGTGCAGCATAAGTGGCTGGCAGAGGCAGGGAAGACAGCAGAAAGGAAAGAGAGAAAGCAGAA
AGTGAGAGAGAAAGAGAGATAGGAAGTGTATAGCAAGAGGGAGTCCGAAAGAAAAGAGAGAGAGAG
AGAGGGGGAAGACAGAGAGACAGAGGAAGAGACAGAGAGACAGAAAGAGAGAGAGAGAGAGAA
GAGACAAAGAGGAGTCAAGAGAGGGGAAGAGAGTAGTAAAGAAAACAGTGTACCTATTCTCTTT
AAAAGCCAGGTTAAATTTAAACCTATAATTGATAATTGAAGGCTTTTCTGTAACCTATAATACTCC
AATACCACTTGTGTGAGTGAACAAAGGTATAGCCCCAAAGCACTGAGGCCACTGACAAACCCGTAG
CCTTCTTATCAAAAATCCTTAACACAGCAGGTTTCTTAACAGGGAATCTAAATCTTAAGGTCCGACCCAG
ACATAGGAGGAACCTGCTTCAGGACAGGATGATAGTGTCTCCAGGTGATTAAAGGAAAAGACAC
AATGGGTATTGAGTAAGGAAACTCTTATAGAACGAGAGTAGGAAATTTGCCCTAATAAGTGG
TCTGCTCAACGTTGAAGCTGTTTGTGCTTTGCACTCAGCTAAACCTTAAAGTACTTACAGAAATCAGGA
AGGAGCCATCTATACCAATCTAAGTTAATATGGACTGAACGAGGTTTATTATATAGCAAGAAAATTA
A'

FIG. 16A(27)



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A'

AAATCTCAAACTTACAAGGTTTTCAACTAAAGTTTGCCTAAAGTTAAACAGCGTAACATGTATTA
TCCTACTACCTCACACTCTCTCAAAGGATTCTCAGACAGTTTGCAAAAAGAAACGAAATCTGTCCCTTA
CTCTACAATCCCAAATAGACTCTTTGGCAGCAGTGACTCTCCAAAACCGCTGAGGCCTAGACTCTCTTA
CTGCTGAGAAAGGAAGATTCTGCACCTCTTAGGGGTAGAGTGTGTTTATATACTAACCAAGTCAGGGAT
AATATGAGATACCAACCCAGTGTTCACAGGAAAAGGCTTCTGAAATCAGACAATGCCTTCAAACTCTTA
TACCAACCTCTGGAGTTGGCGACATGGCTTCTCCCTTCTAGGTCCTGTGACAGCCATCTTGCTAAT
AGTCGCATTTGGGCCCTGTATTTTAAACCTCTTGGTCAAATTTGTTTCTCTAGGATCGAGGCCATCAA
GCTACAGATGATCTTACAAATGTAAACCCCAAATGAGCTCAACTAACAACTTCTGCTGAGGACCCCTTGA
CCGACCCGCTGGCCCTTCAATGGCTAAAGAGCTCCCTCTGGAGGACACTACCACTGCAGGGCCCCCT
TCTTCAACCCCTATCCAGCAGGAAGTAGCTACAGCGGTCTATCGCCAAATCCCAACAGCAGCTGGGGTGTCT
CTGTTGGAGGGGGATTGAGAGGTGAAGCCAGCTGGGCTTCTGGGTCAAGTGGGGACTTGGAGAACTT
TTGTGTCTAGCTAAAGGATTGTAATGCACCAATCAGCACTCTGTGTCTAGCTAAAGGATTGTAAATGC
ACCAATCAGCACTCTGTAAATGGACCAATCAGCAGGATGTGGCGGGGTCAAATAAGGGAGTAAAAAC
TGGCCACCCGAGCCAGCAGTGGCAACCCACTCGGGTCCCTTCCACACTGTGGAAGCTTGTCTTTTG
CTCTTCACAATAAATCTTGCTGCTGCTCATTTCTGTGTCCACACTACCTTTATGAGCTGTAACTCA
CTGCGAGGGTCTGTGGCTTCAATCCTGAAGTCAACAGACCCAGAACCCACTGGAAGGAACAAAGAACTC
CCGATGTGCTGCCTTAAAGAGCTGTAACTCACTGCGAAGCTCTGCAGCTTCACTCCTGAAGTCAGTG
AGACCACAAACCCAGAGGAAGAACTCTGGACACACCTGAATATCTGAAGGAACAACTCCAGAC
ACACCATCTTTCAGAGCTGTAACTCACCCGCAAGGTCTGTGGCTTCACTTGAAGTCAGCAAGACC
AAGAACCCACCGGAAGGAACAAATTCAGACACACAGTAGGAAATCTGTATTTTGTATCTGTGGCTTCCAG
GGTTACTCCAGTCATTGAAGTCTCCATTGCAGCCTTAAGGAACACAGAGAATGGTTGGAGGAGCACATG
TGGGAATTGTTATGGACCAAGGCTTGAGATGCACATAGGGCATTTCTGATCAAACTAGCTGGAAGCAGG
GCCAGGAATATAATCTAAGGAAGACAGTTTTGTAGACAGTAGTAGTCTTTGCATCTGAGACATGTAG
ATTATCAAGCAATTAATTAGAAAAAATATAGCCAGGTGCGATGGCTCATGCCCTGTAAATCCCAGCACTT
GGGAGGCCAAGGGGTGGATCACAAGGTCAAGGCTCAGGCTCGAGACCCAGCTGGCCAAACATGGTGAACCCC
GTCTCTACTAAAAATACAAAAATTAGCCTGGTGTGGTGGCAGCATCTGTAATCCCAGTACTCAGGAGG
CTGAGGCAGGGGAATCTCTTGAACCTTGGGAGGACAGAGTTGCAAGTGAAGCAAGATCACACCCACAGCACT
CCATCCTGGGTGACAGAGCGAGACTCTGTCTCAAAAAAAGAAAAAAGAAAAAAGAAAAAATATAATC
AAGAAATATGACAGGTAACATTTTAAACACTTACTATGCACAGGCAATACACTAAGTGTGTTTACAT
GGATTAACCTCATTTAATCTTAACAATAGCCCTATGAAGTCAGTGTGTTATATCTCCACTTTATAGAT
AAGGAAACTGAAGTACAGAAAGGTCAAGTAGAGAAATGGCCATGCTTGCATCTCTCAGTTTGAAGCAA

B'

FIG. 16A(28)



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B'

CTGTTACAGGAATCTGGTGAGAAATGCTCTAACAAAGATGTGAGTCAGGGGTGGAGGTAAGTCTGAGTC
TGAGTTGGGCAGTTGGGATGGAAGGATGGATGAAGAACACAGCTTGACAGAGAAGCTGACACTTGGCAAC
TCTGTGGGACCTTGAAGGTTAGAGGACTTCAACAAAGAACTGGTGGTCAGGAAACGGGAGGGTCA
CGCAAGGAGGAAAGGAACTGTACACACAGAGAGTCTGAAGCTACTACAGTGTAGTTACGCGTAT
AAAGAAATATTTAAAGGTAACTTATAACCTCATGCAATATAAAATGAACACGTCACAAAGATCT
TATTTAATTTAATTAATGAGGAACTGTAAAGTGTACAGCCAGTTCAAAGGATAATTCAAATAA
ATCCATGCACATATGTAGGCAATAAGGAATGCTGAAATGAATTTAAAGTAGATGTAACTGATTTATC
CACAGAGAAATAATCAGTTGCATTTACATAACAAATTCAGTTGCTTTCTACAGAAAGGAATTTGTTG
CATCATTAACCAATTTTCTACAACTAACAGAATTATAAAATAACTCAAACACAATGAAGGCAGATATA
ACCCACAATGGTATGATAGATACAAATATCCACATCCAGGATGTTTTTTCTCATTTCAAAGTCTTTTAC
AAGTTTTCTGATAAGGGAGTGTCAATAATACTGTATGGCAGGCAATAAGACTGGATGGATGGTTGGG
CCAGGTTTTAAGGGTAATAAATGCCATGTAAAGGTATGTGCATACTGTGCAACATGTCCGGGGAATCT
CAAATATTGGTAGAGTATGTAGGAAACACTTGTGGGAGCTTGTAAATAATTCAAATTTCCCAGACCCA
ACTCCTCAAGGGTCTAATACAGTAGGTTTGGAGTAAAGCCTGAAAAATCTGCAATTTGTCAAAAAAAA
ACCCAGGTGATTTCTGATACACTTTGAGAAGCACTGGTGAACATAAGTCACTGAACGTTTTTTGAGCAG
GGGAGAAACCTGAGGACGTCATGTTGCAGCAGTGGAAACTTGATTAGAAGTAGGAGAAGATGCATGGT
CTTAAAGAAATGCAAAATGATGGCTAATATTGAGTGCTTATGATGGCCAGGGGCTGTGCTAGGCGCG
TGGCACACATTCATACGATGGAAAGCCTGTACCAGTCAGTATTAGTGGGTATCTTTAAGAGTGACCCAG
AATTAAGGGGGTTTTTCAACAAAGCCTGAGGACTGAGCCTCCTCATCTAAATTCAGACACAATGCTGT
ACCTATGCATTTGCCCTCCAGGCTGTTCTCGGCTCCAGGACTGGCCAGGCTCCTGATAAATAGGGA
CTCCCAACACATAAAGCCTGGATTTTGGAACTTCTGAACTGTTACTCAGGCTTTCTAGTAACTGTGGA
GATCTGAATAATAACACAAATCTAAGTTCCCTACTCATAAAGCTGCTCATCTTAGATGGGTAAAG
CACCTGAAATACAAATGAGCATCACTATTTTCAATTCATCCATGAATGAACATTCGGGGAGATCAGTAA
GTTGATGTATCACCTTGAACAGGGCAAAATGAATACTCACCAGGAATATGTGGTATTTTAAAAAGAG
GCAAAGGGAAGATAGTGGGATGGGGCAAAAACCTTAAATAGATTCCCCCAATCATATATGGCAATTG
AAGATAATTAAATATCATTTTAAATTGAGTAAAGTACTCATAGAGCCCTCACTATTTGAAAAATGAACCTG
CTCCTAATTGTTATTGTGCAAAATGTGATACATTAACCTTAAGCTATTTAATAAAACATCCATTTTCGG
AAGCTGTAGTAGGTTCTCCAGGTCAGATTTGATAAGCCATAAAGAACAAATGCCAATCCTATTTTTC
TATGGTGTGGGAAATAAGAGAGAAATGTGTAATTCAAAGCAATCATTTAATTTTATCCAATAGCTTGA
TTCTCCTCTCTCTTAGCCTTTTAGCTAAGCTGTTACCAAGTAACCACTAGTTGGCTTGAGTCTTA
CCACTGTTTCCCTGACCCACAGTGGAGAGACTGCATCTGTTAAAGAGCAGTTATGTAACCATGGCTAT

C'

FIG. 16A(29)



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C'

GCTGAGCTGGGATTCCCAAGGCTTAGGTTCTTCTGTGAATGACCTTCACCAAGACACACCTGAGGTCGTGT
GTGGAACACACAGGCTTGTCATCTCTAAGGCAGAGTTGATAATTCATCTGTTCTTGAGCCACACTGA
GAAAAAGATTACATGACTGCAGTTATTGTAATGCCCTCATGGAAAGACGCTTATAAATATTATAATTAA
TGTTATCATTAAGTAATGCTTCAATGCAGATCTTCCAAAGTATAAATATCAGCTGAGTAAGAAGTCAATC
TTCCCTGAAGCAAAATTGAAATTTGTAATGCGATTCTGGGAGCTTATTTTGTAAATACATGATTCAG
AGTGTCCTATAACACACACAATTGTCTTTTTTCCCTACATGGGCTATTACAAACAAATTTGGACTTATA
ATGTTTATTTCCAGGGATGACTAGAACTTTAATAACAAACCTTGGGCCAGGCATAGTGGCTCATGCCTA
TAATCACAGCACTTCGGGAGGCTGAGGCTGGTAGATTACTTGAGGCCAGGAGTTTGAGAACAGCCTGGC
CAACATGGCAAAACCCCTGTCTCTACTAAAAATATAAAAAATTAGCCGGTGTGGTGGCGCATGCCAGTAA
TCCAGTTACTAAGTAGGCTGAGGTACGACAAATCGCTGGAACCTGGGAGCGGAGGTTGCAGTGAGCTG
AGATTGCACTACTGCACCTCCAGCCTGGGTGACAGAGAAAGACTCTGTCTCAAAAAAATAAAAAAAT
AATAATAATAAACCCTGATGAAAGGTTCTFAAAATGTTTTCATCTAATGGTTTCTTGACAAATTAA
ATTTCTATATAATGTCAAGTTCATAAAAAAAGTGAACGACCAACATGTATATCGACTGCTTAAAGA
AAATACGTATATTTACAAAACATATACACGATACTGTCTTTTGTCTGGTTAGTTTAGAGGTTAGATAAAC
TGCAGTATGTTGAGTGACAGATCATAGAACTAGGAGTCAGGATGCTGGATTCTAGGAAGCAATGA
ATAGGTTGCACGGTGACAGCAGCATCATGAGTATCTCAGGGAGCTTGTAGAACTGCAGATCCTTTA
ACTCATTGAATCAGAAATCCCTAGGTGGGGCCCTGAAATCTGTATTTTAGCAGGCTCTCTGGGATTGT
GATGTGCCTTAGAGTTTGACAACCACTGGGTAGCTGATCTGACTTAGACTTATCAGGCATGTGATCTT
GAACAAGTCACATAATCTCACTGAGTTCAGTTTCTTATGCTTAAAAATAGGCCCAATAATATCTATTT
ACATGGACTGCTTTGAGGATTAGGCAAGAGATCTGTAAACAGACACTGTAGAACAGTGTCTCTGGTCTAC
AGCTGACCTTCCATAAATGGTAGTTGCCCTTGATCTCTGCTGCCACATAATAGCTGGTTAACTATGAG
CAAGTAATTTAGTTCTCTCAGTTTAGTTTCTTCACTGTAAAGAAAGGAAATAAATGTTTATACTCAA
TTTCTGAAGTGGCTATAAAAAATCAGTTTAAATATAGGCAATTAAGCTCTTTGTACACTGTATAAGGAC
TGTAACATCTAAGGATTAAATGAGACCAGGCTTATGATTTTAAGCATGGAGTAAATAGTAACTGACTC
TGTTCTATGAACCAACATGGAAACTCTAAAGAAATATGCACATTTGAAACACAGGATCATCTGGGGAAGG
TGATCTGCTCACCACCAACAGTTTCATGAACATCAATCTCCAGTGGCGTGTGGAGCTAGCTGTACCCAGC
TCATGAGGGCCAAATTGTTTCATTTTAGGAATTTTGTGCTGTTAAAAAATAGTCATTTATTTAAATTT
AAATTATGTAAACAATAATTAGATAAAATAAGTTAAATAAAAAACAAAGGAACATAATTATCCCCCAA
CTCTTCCCCACCTAATTATTTTACTATCTGTGCCTTGGGATTATTTACATTGATTTTATCCATATGGTG
ACAATACTATTTCATATATAAATGGTGTGCTTCTTTCATAAATCTACATAGCCCTGATGTCAGGCTAGTA

C'

D'

FIG. 16A(30)

D'

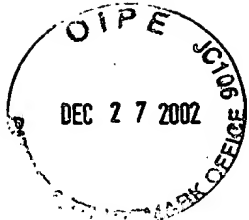


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D' GCTTGAATTTGCCACAGTGGGAGTGTGAGCATTTGTACCATGAGGCTTGGCCAAGGCTACAAAATCCAG
ACTTTTGTITTTCCCTCTGGAGAGCTGCTGTTAAAAATTTACCAACACACCACTGGTCTTACCTTTG
TTAATTTACCACAGTCCAGGTTCTGACCTAGACTTAGAAACCTGGATTTGTGAGCAAGCTGAGGATAGA
GCCATTATTTTAAAGAAGGACTCACATTACCCAAAGTGCAAGCCTGATATATACCTTCAGAATATCAAT
TTATTAATTTACAGTGAAGAAAGCCACCCAGGGCATTTCCAGGGGAAGCAAAAGAGCTAGTTGCA
CATTTTGAATGTTTATGACATTAGGGTAAGGTGACACAGAAATATCCATTTCCACAACCTGAGATACCTG
CTGCCTTAAGGAAGGACAGGCAAGTCTTGGGAGGACCTTAGATTGTCACTGTCCATCTTGTCTCTAG
GACTCTCCTTTCCAGGCATGACGATGGCCAACTCTGTCTCCTACCTACTGATGGGATTATCTTTTCT
TGACACATGGCAATGCCCTCCAATCAGAGGCTGGTAGCTATTTTAAATCTTCAGGGCAGTATTTTCAAA
GGGAAGTTTCATGGACCATATGCACTGTATCATTTTAGATGTATATTAATAATGCTTAGTCTTCCCCAGT
TATACTAGATCAGAAATCTCTGTTGGTGGGGCCACGAATCGGTATTTTCAACAAATCACTAGGTAATTT
CTGTATATACTATAGTGTGAAGACCACCTGCTTGAAGGTTTCTTTGCATATCTCCACTAAATATAAAAAA
TATTGACTTCTAGATTTAACTCCCAAGCACTTGCAATTTTAAAGTTTCTGGGGCATATATTTGTGTA
CCCCATACCACCTCACACTCTAGTCAGGAGGTATATATGGACTGAATGTTTGTCTCCTCCAAAACCTC
ATATGTTGAAGCTTAGCTTCCAATGTGATAGTATAGGAGATGGTGCTTCTGGAGGTAAATCAAGC
CCTCATGAATGGGATTAGTGCTTTAGAAAGAGAGCTCCGTCACTGTCTTTCCATCAATTTGAAGATGCA
GTGAGAAGCTGGTAGTCTTGCACTGTGAAGAGGGCCCTCACACAACCTGATCATGCTGGCACCTGGTCT
CAGACTTTCTGCCCTCCAGAACTATGAGATGATAAATTTCTGTTGTTTCAATCCCCACCCAGGCTACAATA
TTAGGTTGCTGCAAAAGTATTTGTGATTTTTCCTTTTACTTTTTCAGGGCAAAACTGCAATTTACTTTTGT
GCCAACCTAATATTTTGTATAGCAGCCCCGAACCTAAGCAAGGAGACTACATCAGACAGTGTAGCTAT
GTAAGTACAAATGTATCCCTGTTGAGGAAACTAAGTTCTAACCTGACTTCAGGCCAGTAGCCACCTT
TTCAATCTCTTTTCATGAAGGGACCATTTATCATTTACTGTTGGCAAAATAGAGGCCAGAGAAATGGAA
TTTGCTTTTCTGTGAAATCTCAGTGTATACAGATTGAAGAGCAAGGTTTGTCTTTTCATCTCTAAGAAAGC
AAAAGTGAGTACGGACTGGCACATTTATCAGAGAAAGAAATCATTTAGCTCGGTGGTCTTAACCCAGGAG
TGAATTTGACTCCAGGGAAACAGTTGGCAATGTCTGGAGACGTTTATTTTATTTAGTGGGGATGAG
TGGGTGGGTTGCTACTGGCATCTAGTGGGTGGAGACCAGAGATGCTGTTAAACATCCCGCAAGCACAG
GACAGTCCCCGACAAAGAAATATCTGGCCCCCAATATCAATAGTGCCAAAGTTGAGAAACCTCAT
CTAGCTTCTTTTCCCTTCTACGTTCTAATCAACTGTTGTTCTTTCAGCATTAGGATTCATCCAGCAGT
CTCTTTCCCCAGCAATTTGTTGAAAATTTTTTAAAAATGGACTCATTTTAGTGTACAGAAAGAAATA
CATTCACAGGAAAGGATGGGTCAATTTTGTTTAATGATGTTTTTGCCTTTTCACATAGCAAAAGCTTAATAA
AGTATTTTAAATAAAATGGTGAATAGATCAAAACATTAATTTACATGTGTTTTTAAATAAATAACAGGA
AGATGGCTATATATATAAATTTGTTCTTGTATATGTCTTGAGTGGATCATCAAAACACAAACGTTATCTAC
E'

FIG. 16A(31)



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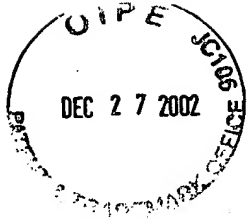
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E'

ATGCCTTTCTTGTAATAGATCTAATAATAACGGCTCTTCTAAAAACAAATTAATGGATATTATTGC
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TGAAGAAATGTGAGAAAGCACGTGGCTTCAAGGTTAATGTGAAGACTCACAGAAACTTGAAAAATCAC
TATGACTAAAAAGAAAGTATGAGCTCCCTGCATGCCTGTAAATTTGGAATGACAGCCAAACCCAGTTAAT
TATAAAACAGCTAATTTAACAGGTTTTCAAATTTGTTCTTTCTCCAAGTAGCATATAGTCAATAATC
CTTAAAGAGAAAGCAAAGAGGGGAAGCACTGAACCAAAATTTGCTTTTGTACCTGCTCAGCTCAAAT
GCAGAGTTCTCTACCTGGAAATTTGACTGCTTCCATAGTTTGATAGCCACAGAGAGATGGGAACAGAAAG
AGAGGTATAATCCCAGACTTGATTCAGCTATAGAGAAATGACAAATAGTGTGAGAGGCCCTTCCAACCCAGAG
CGACTCCATCTTGAATACGGGCTGGGTAAACAGGGCTGAGACCTACTGGCTGCATTTCCAGGAGGCT
AAGCATTTCTAAGTCACAGGATGAGACAGGAGGTGAGACAAAGACCTTGCTGATAAAACAGGTTGTAATA
AAGAAGCCAGCCAAACCCACCAAAACCAAGATGGCCATGAGAGTTATCTGTGGTTGCTCAGCTGCTC
ATTGTATGCTAATTAATGTATTAGCATGTTAAAGACACTCCCACCACTGCTATGACAGTTTACAGG
TACATTGGCAACTTCCGGAAGTTACCCCTCTATGGTCTAAAAAGGGAGGAACCCCTCACCTCCCAGAAAT
GCCCCCCCCTTCCCTGGAAAACCTTGTAATAATTCACCCCTGTTTTCAGCATATAATCAAGAGTAACCTGT
AAGTATCCTTAGGCCAGAGCTCAGGCCACTGCTGTAATGTGGAATAGCCATTCCTTTTATCCTTTACT
TTCTTAATAAACTTGCTTTCACTTTACTGTATGGACTCCCTGTGAAATCTTTCTTGCAAGAGATCCAAAG
AACTCTCTCTTGGGCTCTGGATCAGGACCTCTTTCCAGTAACAATAGTAGTAAGGGGTGAGGGAGACTG
GACAAAGGAGTTTAAAGAGCCTTAGATAAAGGGTCCCTCATATTGTATACATAAAATCATGGACTCC
TAGAATTTTATAGCTGATAGGATTAGAAATTTCAAAATTTCAATTTTCAATTTTCTGCGAAACA
GATGGCCAGAGAGGCCAAACAATTTGTTAAGGAGCACTGAGGGCAGACCACTGGAACGCAACCCCTCT
TAGCAGAGTATACAAGGCCCTTTGATCTCCTCAGTCAGAAATGAAGTACAGCTTTCCAGGGTACCCCTTCT
GACTGTTTAGCATGTTTGGCAGCTGACTAATTTTGAAGTTGCTTAAATATCTGTCAATTTCCACTGTAT
CATAATCTCCTCATTCATCTTCAATCTCCAATGCCCTTGAAGTCAAGTAAATGTTAGTTGAACAAAAGTAA
ATTGAACCCAGAAATTTCTGATCATAATCTGGAGCACTTTAAATTTGTACAGCTTACTGGGAAACGGGATA
ACATGTGATTTGCTTTGATTTTCTCATATGCTTTTCCACCTATAGATGCTACACGAATGTT
TTTAAATCTGATATAAAATTAATAATTAATAATTAATAATTAATAATTTGATACAAATGCTACATTTA
GAGTGTGTGATTAGATTCCCTTAAGTGTATCATGGTGTATCTCTACATCACGTTGGTGTCAAAATGCTTT
GGGTTTAAACACATAAAGTACAAAGGCTTGGGACATGTAAGATCCCAATACATTTTATGATTTT
TTTTCTTTGTTGCTCTTTTAAATAACTTTTTTTTGTATTAAGAAATAATTCATGTTTCAAGTGGAGAAAC
CATAGAAAATAGTGACAAAGTGAAGGAATAAATTTAAATGACCCATAAATTTGTACCATACATCTGATTT
TTTAAACGCTGAACAAATTAGCCTTGGGTAAAGTACCAAGGAATAGAGTGCAGCATTTAAAGTTAAAGTTT
GGGGAAGGATAGCTGACTTAAGAAATTTATCTAGTTAGACATTTTTTGGATGGGTACACTGTTTGRGAAG

F'

FIG. 16A(32)



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F' G'
GGCGATCGGTGCGGGCTTATTTCGSTATAAACGCCAGCTGGCGAAAGGGGGATGTGCTGCAAGGGCGATTAA
GTTGGGTAACGCCAGGGTTTTCCAGTCAACGACGCTGTAPAAACGACGGCCAGTGAATTGTAATACGAC
TCACTATAGGGCGAAATGGGCCGACGTGCGATGCTCCGGCCGCCATGACCCGGGATTATGTCTCTA
CTGTATTTAGAACTCTGATAAAGCCCCATTAGAAATTCATCTCTTTAAGAAATAAAGAAAGCTGAGGAACT
AAAGAGAGGGTTGGAATAATCCACTAATTATATCCGTTAAGCTTCAGTTACGTTAATAGGAATATCAC
ATGACTGTGGTGTGCTTGTCTGAACAGTAAGTACATGAGGAAAGATAAGATTCAGGGCTGAAATG
TCCTTCAGCATATGTAGGTAGTGGTGATGAAAGTCATTAAAGAAATAATTGATTGAGGTATTTTAGTAA
ACAAAAGAACTCACCACTTACCCATCAGGAAGTGTATTGTTAATGCAGTGTCTGTTCAGCCTTCTGGAAG
AAAAGGTTTCTTCATGCTTCTCTTTAGCCTAATTCTTATCTGTCTGCTTTTCAGGCCAAAATTAAAAA
AAAAAAAGATTGAAAACGATGCTCCTATTTTATTTGCTTCAAAAGAAACAGGCTGTTGCAATTGTGCTT
GGAACAGTTTACTCTTTGGCCTTGATGTAAAGTGTGAAAGGAAGCCCATGTAATTGACTAGGCAGTATCTG
AAGAAGCAGGAAATACAGTGTAAAGAAATGAACAGGCATGAAAACCATGGCTATTTGATAAAAGTAAA
TAATTTCTGCAGTTCACATGTTCTCAGCATATTTTCTTTGATACTGACTTGCTTAATATGACAATAGCA
GAACCATGGTAGCTTGAGGCATTACTTTTCTTTTAAATTTCTTTTACATTTTGAAATTTACCAAGCACTCA
CATTGTATTACTTTTGGGTTATACTGAGGATCTATAACTTATAGATCAAATACCTGACATATATATGCG
ATTCTCTGAAGTCTTAGGGCAGAACTAGAACATTTCTGTGAACATCAGTATAAGATATTAATAATGGAAG
TTTTGCCCTAAGACTGAAGACAAATAAAATATCATAGTCTGAAATGAATGCCAGCACACCACATACAGGATT
TAAATATCTATACATATATATGTGTGTATTATATATATATTTAATATATATCTGTGTGGGATAGGAAAGA
GGTAGGGGAAATCAGTTTACAAATTATTAAGTATTTACCCCTTGACAAGAGTATATATATTTGGAATC
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CAGGTAGGAGAGGCCCTGTGCTCCTCAAGCATAGTTGGAAAGGACCTCAACAAGACCACTTCAAGAGT
CTAATGTGTGGAGACTGTTGCTTAGGGAGACCTTATGCTAGCTTCTGACTCACAGCTAAGTCAGGGA
GACAGGTTGGCTGCTGATCGTGGAGTCCAAAAGATGGCCTGCACCTGAAAAGCCTCATGAGTGTGAC
TTAGGGCTAGCTAAGAGGTCCCTGGAAGAAAGAAACACTCAGTAGGAGAGAAGCTGGAGGTACCTTCAG
TGCTGAATTTGGAACCTAGATTCAATTCCTGAGAGCAAAATACATAGGAAAGATGCCAGTATGGAG
AGTGGGGTGTCTCTAACAATTAACCAACCCACCTGCCCCACCCCTAAGAAAAGAAAATCACATACAA
CCAGTCAGCTGTAAACATATGCCGAGCCTAGTAAACTCAGATACTAAGTTACCAGGGTACCTGGCAAGT
AAGAACATTCCTGATTCCCTTCCCTCTCTCTCTTGGCCCTCCAACTTAGTGGCTAGCAAGATGGG
GAGAGGAGGAGAGCTGTAAAGTGGGGAAGAAAGAGCAGCTTTCTCTCTCTTTTACGCTGGATTCTCC
CTCATCATAGGCCCTGAGCTGGGAATCAGGAAGAAAGGATTCTTTTAAAACTGAAGTAACTGTTATCAT
TAATTTTAAACATTTTAAATTTTGACAAATGTTGAGATTAGATATATACTAATTAATAAGATTATG
TTTTGCAGCTTGAAGTGATAAGAAAACCTCTTATCTAAGAGCATCCAGGAAAGTCGGGGTTTCTCTGA

FIG. 16A(33)



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G'

ACATCCTTTTAAATCCTTTGGAAAGTCAGCTTTTCAGAGAGGATTAAAGTGCTAGACTGGGCCTTCAGAAA
CTTGGTTAAATGAGGGGTTTCCCTATGACAGACTTGGGACTATACCTTGTGTGGAGAGAGAAAATAAGA
TTATCTTACATTTTCCCATTCCTTTTCAAAAAGAAAGCTCAGCTAGCATGAAAGTTAAATTCAAAAC
GTAATGGGTATTATTGTCATATTCAAATCTAGTGCATATCATGTAAGTACTGAATTAATGTTATTCATTA
TTTCAAATGACAAGCTGGATTCTTTTCTTTCGAATTCACAAATTAATTTTCCCTGGAACTTTTGG
TTTGGGCTTTAAGAGTTTAGGCTTTCATCACAAAGAGAGGACAGCCTTGAAGATTAAAGTGTGTGGCTC
TTCTCAAGATGTTCTTAGTCCAGCAAGGATTCTATGCATATTGGGCTTCTCTGTCTCATAACTG
TATTCTTGATATTCTATTATATTCTGTAAGATTCTTTTAAAGGAAAAATCTTCCATGGTTGAA
GGACATGTCAAAAATAGAGGATACAGTTTATATCAAGGAAAGTTTCAATGATGACTGTAGAAGCTCA
TTTGACTTAAGACACATCATTTCCCTCATGGAAGTTTAAACAGATCTGTACAATAAGGTTGGCAATCTT
TGTGTAACACAGTTTCTCTGCTCTAAAGAAAGTGTATATTCAAAATGTGAATGTCAAGCAGTC
AGAAATAGTATTTTAACTTCGTTTCAAGTCTCAAAAACCTGTACCTAATCATGAATTTTTTT
TCCCACAGATTGTTCTCTCTCCCTCCAGAACTTTTGAAGTTTCTACATGACACAGGACCTAT
GTCTTTTTTAATTACACAGAAATGAAGAAAAAGTGTGTGTATCGTTAACCAATATATGAAATC
TTTAAGCTGTATTTTAACTTTGTTTGCAGAGGCCATTCCTTTGGTTAAATAATTTGTT
ATTCACAGTTTCCCTGTCTCATATTATCAAGGGGAAATTTGTAGAAATTTTAAAGGAAGCTCTAGGCA
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GGAATATCGATAGCAGTTGAGTTTAAATAGACTTCTCACATTCCTCAATTTAAAGCTTCTCTCTGTGCT
AATAGAGATACAATAGCAGTAGGCGTTTAAAGAGAATGAATCAACAATTTAAAACTATAATGTGTTTTT
TATTCTATCTCCCTTATTCACATATATTGTTTGTGTTTGAAGAGGATTCTGCTCTGTGCCCCAGGCAG
GAGTGTGTGGCACGATCTCAGCTCACCGCAACCTCTGCTCCCGGTTCAAGCGATTCTCTTGCCTCA
GCCTCCTGAGTAGTGGAGCCTGCCACCATGCCCGGCTAATTTTGTATTTTAGTAGAGATGGAGTTT
CACCATGTTGGCCAGGCTGGTCTCGAACTCCTGACCTCAGGTGATCTGCCACCTCGGCCTCCCAAAGT
GCTGGGATTACAGGCGTAGCCATCACTTCTGGCCCTTATTGCGATACAAATTTAAAAATCATCACAGAA
GGTTTGAAGAAGGAAGGGCAGAAATTAACCTACTTTCCTCTCCCCAGCGATCTCCTTCAAATCTGT
GCCTTTCTCAGGCCAGGCTCAATTTACTGAGCAGTCACACCTCACAGAGGAGGTCTGGCAATC
CACTCTTGGTCACAGGAAAGCCATTGACCCCTCCCACTTCTCTCCCACTTGTCTCAACTCTTGAC
TTTGGGCTTTGTTCTGTCAAGTCTAGGAACTGGTTTCTTTTATCAGGTTAAGTATTAGTCTCTT
TCCCTCTAGTTGCTCTCACTCCCTGACTCTTGCCTTCTGTAACAACTGGAGACAACCTCTTTCAAAACCA
GCTCCAAAGCCCCAGACTTCTCTCTGGGCTTTAGTTGTAAGGCGAGGTGCCCTACTGAGTGAGCCTAGAT

H'

FIG. 16A(34)

H' _____ H'

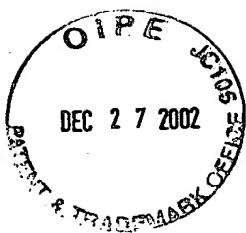
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CCGGCATGGTGGCAGGCTCCAGCTACTCAGGAGGCTGAGATGTGAAATCGCTTGAAACCCGGGAGGT
AGAGGTTGCAGTGAGCTGAGATCTTGCCATTGCACTCAACCTGGGCAATAAGAGCGAACTCCATCTC
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ACCTGTCACTTCTGCCACTCAGCACCTCTCTTTCTTTAGGGAATGCTACCCACTCTTTGCATGGGT
CTGGATGGAAGTGTGATCACAGTGTCTTCACTCCCCATTTGCTCACCAGAGGTAGACAGAAAGACCC
AAGCCAGGCCAGTTACACACAATCTTCAGATAATTAACCGTATGATCACAGTATCACCCCACTCAAGGC
TTGGTTGGAGATGAGCAGAAAGAGACTAAAGCTGGGTCAATTTAATTAACACCTGTACCCCAAGAAAGA
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ACCCAATCTTCCAAACAGTGTCTTTGGAAAGAAAGATAGTCAGAAAGAAAGATAGAGTTGTTTTCTGTT
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TTTATAGATGATCTGTACCAAACTAGGTTGGTTACATAAATGCTTATTCAACTGGCTTAAATCTATA
ATAGAAAGATGACACTTACTGAAATGTTTAAATATACACTTTGTGTCAGGGCTTTGTATTTCTATGACAT
CTTCAAAATGACCTACTTTCTATTTTATAAGTAAGGACAGGAAGGCTTCAAGAAACATGACTAATTTT
CCCAAGGCTGTACCAAGCCAGAACCCAAATCTATAAGGCTTTTAAACCTGCATTTCTAAACCTGCATC
TCGGCCATCTTATTCACAGAACTTAAGGTTAGAAAGCCAGATTTGGAGTCCCAATTTTCAACCACTTAGT
AACCAGACAAACTTGAGGAATTCACCTCAACGCTTTTGAATCTCCATTTCTCAATCTTTTAAACCTAAAC
AATAATACTGGCCCTACCTATTTCCATAAATTTCTGAGGCACATAAAAAATAGTGTGGAATAATTGCTGT
ACAAATGTCAATTGTTACCGTGATTAATTAATCCCTGAACACCATGGATGAATGTCTGTGCTGCTAT
TAAAGTCTATAAAAAATATTGGGGCCAGGTACATTTGGCTTATCCCTATAATGCCAGCACTTTGGGAGCC
TGAGACAGGAGGATCACTCGAGGCCACGAGTTCAAGACCCGCTGGGCAACATAGTGAGACCCCTTCTC
TACAAAAAAGCAGCCACGTGTAGTGGCACACACCTGTAGTCCACATACCTCAGGAGGTTGAGTTG
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I' _____ I'

FIG. 16A(35)



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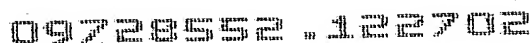
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J'

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CTGCTTGTAACCTGAGGCCATATGCCCTGTAAAGCTTCTGCAGGGTTTCTACTAAGCTGGGTTCCTTAT
ATGGCTCTCTCCCATTTCTGTTGCCCTCACTCTAGTATCTTCTCTTTTCCCTCACCTCTGGGACTGGTG
GCTGTTTGATGGACTGCCCTTAGCTTGGCTTGGGTTTTTCTGGGGACAATGTCTTCAGATTATCCT
AGACCAATAAAGTACAGCCACTGGGCCAGGCTCTTCTCTCCCTCAACTGGACCATGTTCCCAAGGCTCT
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GATTCCTTTTGACATGTTGTAAGATCTATTACATTTTGTAAATTAAGCATTTCCCTATGGAACCAAC
ACGAACTAAGCTGCTCCTGGAATGCAGGGTGGCTCTCTCAATACAGGATGTTCTAGAGAGCTGTATTTT
GGGCACTTAACATATTCTCCACTACTTAGGGCACAGCACTGAAATTAACACCACTAAGTTTGTCTATGTCC
ATGTAGTTAGTCTCAGGCAGTGCAGCCTCAGGAGTGGAATGAACTGACCTCTTATGTGTGCCAGCCTTTCTT
CCTTCAGAACTCAGCTGTGTTTTCTGTGACTCTCCATAGGAACATCAGTCCCTGAATCCTCAGACCCACC
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CACCGTGAGAGAGAAATGAGAAAGCTGGGCTCTTCAGGTAAATCTTGCTTTTTCACAAGCCCCCTAATT
TTACTGCATAATTATTTTGAATTCAGTGATAATTTCTACAATTTTCCCATAAAGTCACTACACACAATA
CCCTCTCATGCAACACTTGGCTTTGCTAATACATATCTATTATGAGAGCTGTGCTTCTTAAGCGTAAAT
GTTTTATATGCACCTAAGGCTCTTGGCTTACATATAAAGGGGTATTGAGCAATGTGATACAGAAAGTCTT
TTCTCCACAGGTCTCATATGTAAAGAAATTCATTAGATTGGCTGAAATAGACTGATCTGTCCATTCTCT
GCTCACTTATCATAGGAAGTCAATTAGCTAAGGAACAAAACCTACAATCTATGTAATTAGAAGAACAAAG
CTGGTTTTGCTCAATATAAATAAAGAAAAGAAACCATGTGAAAGTCAAAATATTTGTTAATCAGGT
CATTGAGAAATCTATTAAGAAATTTGAATTTCTTATGATGAGAACTATCTTGACTCAAGTGGACAGTG
GTGAGCTTTTGGCTGTGGTCCCTACGTAGAAAGGAGGCTTTGTCAATAAGTCTTATATGTTACAGGT
GCCAAGTTAAGTGCCCAAGCTTGCTCTTAAAGCATACTGGATTTTG

FIG. 16A(37)



A

FIG. 16B(1)

A

TATGGACATATTGTCGTTAGAACGGGCTACAAATTAATACATAAACCTTATGTATCATACACATACGATT
TAGGTGACACTATAGAACAGATCTGATATCGAATGAATCTTTCTTGCAAGAGATCCAAGAACTCTCT
CTTGGGGTCTGGATCAGGACCTCTTCCAGTAACAATAGTAGTAAGGGTCAGGGAGACTGGACAAAGG
AGTTTAAAGAAGCCTTAGATAAAGGGTCCCTCATCTGTATACATAAAATCATGGACTCCTAGAAATTT
TATAGCTGATAGGATTAGAAAATTTCAAAATTTCAATTTTCAATTTTCACTCTCGAAAAACAGATGGCCA
GAGAGGCCAAACAATTTGTTAAGGAGCACTGAGGCGAGACCACACTGGAACGCCAAACCTCTTAGCAGAG
TATACAAGGCCCTTGATCTCCTCAGTCAGAATGAACCTAGAGCTTCCAGGTACCTTTCTGACTGTTT
AGCATGTTTGCCAGCTGACTAAATTTTGAAGTTGCTTAAATATCTGTATCTCCACTGTATCATAAATCT
CCTCATTCATCTTCAATCTCCAATGCCCTGAACTCAGTAAATGTTARTTGAACAAAAGTAAATTGAACC
CAGAATTTCTGATCATAATCTGGAGCACTTTAAAAATTGTCTCAGCTTACTGGGAAACGGGATAACATGTGA
TTTGTCTTTGATTTTTTTTCTCATATGCTTTTCCACCTATAGATGCTACACGAATGTTTTTTAAAT
CTGATATAAAATTAATAATTAATAATTAATAAGAAAATTTGATACAATGCTACATTTAGAJTGTG
TGATTAGATTCCTTAAGTGATCATGGTGATCTCTACATCACGTGGTGATCAAAATGCTTTGGGTTTTA
ACACATAAATGACAAAAGGCTTGGGACATGTAAGATCCCAATACATTTTTATTGATTTTTTTTCTK
TTTGTCTCTTTAAATAACTTTTTTTTGTATAAGAATAATTCATGTTTCTGAGGAAACCATAGAAA
ATAGTGACAAGTGAAGGAATAAATTTAAATGACCCATAAATTGTACCATACATTTCTGATTTTTTAAACG
CTGAACAAAATTAGCCTTGGGTAAGTACCAGGAATAGAGTGCAGCATTGAAAGTTTAAAGTTTGGGGAAGG
ATAGCTGACTTAAGAAATTATCTAGTTAGACATTTTTTGGATGGGTAATTTTGCAGATGACATTAGTG
AGAGAAAGGACTTGCCACTCTCACACAGCTAGTAGGGGTGTGGGAGGATATTGGAACCAAGTTTCAAGT
CTTCAGTGAAGAATCAAGGGAGAAAGTTCTAAACCTTAACAATATCCCTCTGGATGGACATTTATTTTAT
TACTACAATAAGCCACACGGTGAGTCATAAGGAGCATTTTCTTCTAATATGTCTCTACTGTATTA
GAATCTGATAAAGCCCCATTTAGAATTCATCTCTTTAAGAAATAAAGAAAGCTGAGGAACTAAAGAGAGG
GTTGGAATAATCCACTAATTATATCCGTTAAGCTTCAGTTACGCTAATAAGGAATATCACATGACTGTG
GTGTGTGCTTGTCTGAACAGTAAAGTACATGAGGAAAAGATAAGATTTCAGGGCTGAAATGTCCCTTCAGC
ATATGTAGGTAGTGGTATGAAAGTCATTAAGAAATAATGATTGAGGTATTTTAGTAACAAAGAA
CTCACCACTTACCCATCAGGAAGTGTATTGTTAATGCAGTGCTGTTTCAGCCTTCTGGAAGAAAAGGTTT



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A

CTTCATGCTCTCTCTTTAGCCTAATTCCTTATCCTGTCTCTCTTTTCAGGCAAAATTAATAAAAAAAG
ATTGAAACGATGCTCCTATTTTATTTGCTTCAAAAGAAACAGGCTGTGCAATTGTGCTTGGAAACAGTT
TACTCTTGGCCTTGATGTAGTGTAAAGGAAGCCCATGTAAATTGACTAGGCAGTATCTGAAGAAGCAG
GAAATACAGTGTAAAGAAATGAACAGGCATGAAACCATGGCTATTTGATATAAAGTAAATTTCTG
CAGTTCACATGTTCTCAGCATATTTCTTTGATACTGACTTGCTTAATATGACAAATAGCAGAACCATGG
TAGCTTGTAGGCATTACTTTCTTTTAAATTTCTTTTACATTTTGAATTTTACCAGCACTCACATTTGTAT
TACTTTTGGGTTATACTGAGGATCTATAACTTATAGATCAAAATACCTGACATATATATGCAATCTCTGA
AGTCTTAGGCAGAACTAGAACATTCCTGTGAACATCAGTATAAGATATTAAATGGAAGTTTTCCTTA
AGACTGAAGACAATAAAATATCATAGTCTGAAATGAATGCCAGCACACCACATACAGGATTTAAATATCT
ATACATATATATGTGTGTATTATATATATTTAATATATATCTGTGTGGATAGGAAGGTAGGGGG
AAATCAGTTTACAAATTATTAAGTATTTTACCCTTGACAAGAGTATATATTTGGAATCAGTTGGAGA
GTATTTTCAAAGATAAATGTAGTGTCTATGAATGAATCCACCCCTACCACCACTGAGGCAGGGTAGG
AGAGGCCTGTGCTCCTCAAGCATAGTTGGAAAAGGACCTCAACAAGACCACTTCAAGAGTCTAATGTGT
GGAGACTGTTGCTTAGGGAGACCTTATGGTCTAGCTTCTGACTCACAGCTAAGTCAGGGAGACAGGTTG
GCTGCTCTGATCGTGGAGTCCAAAAGATGGCCTGCACGTGAAAGCCCTCATGAGTGTGACTTAGGGCTA
GTCTAAGAGGTCCCTGGAAGAAGAAACACTCAGTAGGAGAGAAAGCTGGAGGTACCTTCAGTGTGAATT
GGAACCTAGATTCAATCCCCCGTGGAGCAATTACATAGGAAAGATGCCCAGTGTGAGAGTGGGGGT
GTCTCTAACAAATTACCCACCCACCTGCCCCCACCCTAAGAAAAGAAATCACATACAACCACTCAGC
TGTAACATATGCGAGCCTAGTAACTCAGATACCTAAGTTACCAGGGTACCTGGCAAGTAAGAACAATT
CCTGATTTCCCTTCCCTCTCTCTTTGGCCCTCCAACCTTAGTGGCTAGCAAGATGGGAGAGGAGG
AGAACTGTAGTGGGGAAGAAAGAGCAGCTTCTCTCCTTTTTCAGCTGCTGGATTCTCCCTCATCATA
GGCCTGAGCTGGGGAATCAGGAAGAAGGATTTCTTTTAAACTGAAGTAACGTTATCATTTAATTTTAA
AACATTTTAAATTTTGACAATGTTGAGATTAGATATATACTAATFATTAAACTAAGATTATGTTTGCAGC
TTGAAGTGATAAGAAAACCTCTTATCTAAGAGCATCCAGGAAAGTCGGGGTTTCCCTGAACATCCTTT
TAAATCCTTTTGAAGTCAGCTTTCAGAGAGGATTTAAAGTGTAGACTGGGCTTCAGAAAACCTGGTTAA
TGTAAGGGTTTTCCTATGCAGACTTGGGACTATACCTTGTGTGGAAGAGAGAAAATAAGATTATCTTAC
ATTTTCCCATTCCTTTTCAAAGAAAGAAAGCTCAGCTAGCATGAAAGTTAAATTCAAAACGTAATGGGT
ATTATTTGCATATTTCAAATCTAGTGCATATCATGTAAGTACTGAATTTATGTTATTTCAAAATG
ACAAAGCTGGATTTTCTTTTTCGAATTTTCAAAAATTAATTTTCCCTTGGAACTTTTGGTTTGGGCTT
TAAGAGTTTAGGCTTTCATCACAAAGAGAGGACAGCCTTGAAGATTAAAGTGTGTGGCTCTTCTCAAGA
TGTTCTTAGTCCAGCAAGGATTCTATGCATATTTGGGCTTCCCTCTGTCTCATAACCTGTATTTCTTG

B

FIG. 16B(2)

B

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B

ATATTCTATTATATTCTGTAAGATTTTTTTTTTAAAGGAAAAAATCTTCCATGGTTGAAGGACATGTC
AAAAATAGAGGATACAGTTTATATATCAAGGAAGTTTTCATGATATGACTGTAGAAGCTCATTTGACTTA
AGACACATCATTTTCCTCATGGAAGTGTAAACAGATCTGTACAATAAGTTGGCAATCTTTGTGTAAAA
CAGTTTTTTCTCCTGCTCTAAAGAAAGTGTATATTTCAAAATGTGAATGTCAGCAGTCAGAAAAATAG
TATTTTTTAACTTCGTTTTCAAGTCCTCAAAAACCTGTACCTAATCATGAATTTTTTTTCCACAGA
TTGTTTTCTTCTCCCTCCAGAAACTTTGAAGTTTTTCTACATGACACCGACCTATGCTTTTTT
TAATTACACAGAAATGAAAGAAAAAAGTGTGTATCGTTAACCAATATATGAAATCTTTAAGCTG
TATTTTTTAACTTTGTTTGCAAGAGGCCATTCCTTTGGTTAAATAAATTTGTATTACACAGT
TTCCTTGCTCATATTATCAAGGGGAAATTTAGAAAATTTTAAAGGAAGCTCTAGGCAATGTTTCA
TCCCTGAATCTTTGGAGAGTTATAAAAACAACACAGATTACTGAACCTGTAGAGAACCAATCGTGAAGT
CATTACATCTAAGCATAAGCAAAATCTCCTCTTGGATCATTAAGTTATAGAAAGAAAGAACCTGCAC
TTTGAAATTTAAATAAAGCTTGGTAACCTTGTAAAGTCAAAACACGTAAAAATTTTACAATTCAGGAATATCG
ATAGCAGTTGAGTTTAATAGACTTCTCACATTCCAAATTTAAAGCTTCTCTCTGTGCTAATAGAGAT
ACAATAGCAGTAGGCGTTTAAAGAAGATGAATCAACAATTTTAAACTATAATGTGTTTTTATTTCATCT
CCCTTATTACATATATTGTTTTGTTTGTAGAAAGAGTTCTGCTCTGTGCCCCAGGCAGGAGTGTCTGT
GGCAGCATCTCAGCTCACCGCAACCTCTGCCCTCCGGGTTCAAGCGATTCTCTTGCTCAGCCTCCTGA
GTAGCTGCGATTACAGGCGTGCGCCAGCAACCCCGGCTAATTTTGTATTTTGTAGAGACAGGGTTT
CACACGTTGGCCAGTTGGTCTCGAACCCCTGATCTCAAGTGATCAGCCCCGCTCGGCTCCCAAAGT
GCTGGGATTACAGGCGTGAGCCATCACTTCTGGCCCTTATTGCGATACAATTTAAAAATCATCACAGAA
GGTTTGAAGAAGGAAGGGCAGAAAAATTACCTACTTTTCTCTCCCCAGCGATCTCCTTCAAATCTGT
GCCTTTTCTCAGGCCCGGCTCAATTTACTGAGCAGTCACACCTCACAGAGGGAGGTCTGGGCAATC
CACTCTTGGTCACAGGAAAGCCATTGACCCCTCCACTTCTCTCCACCTTGTCTCAACTCTTGAC
TTTGGGCTTTGTTCTGTTCAAAGTCCTAGGAACCTGTTTTCTTTATCAGGTTAAGTGATTAGTTCTCTT
TCCCTCTAGTTGCTCTCACTCCCTGACTCGGGGATCCACTAGTTCTAGAGCGGCCGCCACCGGTGGA
CTCACAG

C

Contig 2 (18457 bp)

GAGGGGGGAACCCCTTTCCAAAAAAGAAACAAAGACAGGATAAACATTCTAGATAGTCTCTATA
ATGGTCATGATTAAAGACAATAAAATAGTCTGAAATTTGTCAATATATATAATAAATTTATTTGGCCA
TTCTGCCAAGTAGCAGACACCTGTCAATCTGCCCCACTCAGCACCTCTCTTTCTTTAGGGAAATGCTAC
CCACTCTTTGCATGGGTTCTGGATGGAACCTGTTGATCACAGTGTTTTCACTCCCCCATTTTGCCTCACCA

C

FIG. 16B(3)



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C

GAGGTAGACAGAAGACCCCAAGCCAGGCCAGTTACACACAATCTTCAGATAAATTACCGTATTGATCACAG
TATCACCCCACTCAAGGCTTGGTTGGAGATGAGCAGAAGAGACTAAAGCTGGTCAATTTAATTAACAC
CTGTACCCCAAGAAAGACTGTCAATGAGGCTTTTATACCGACACTCTGTTCCATCTTCCCTGATG
CCATTCATTTGACGAACCTACCCAATCTTTCCAACAGTGTCTTTGGAAAGAAAGATAGTCAGAAAAGAA
TAGAGTTGTTTCTGTCTTTGCAACCAAGGAACCTCTAAATGATAGACTTGTGCTAGGCACTTTGGTT
ATTTTATTATCTTGAATACTTCTGTGATATACTTCTTTGTGTCATGCCTGTTGTACGGATGAGCTTT
TTATATAATTTATATAAATTTCTCAGAAAGTGGAAATTACTTAGTCAAAAGGTATGAACATTTTCTGATTC
TTAATATAAATTTGTGCAATGCTTTTAAAGAGGATTATACCAAGTTTACATTTTGTGTATATATAACAG
AAAGTACTACTGAAAAAATATTACAAAAATTTGTCTCTCTGTTTCAGGAGGACCTTGTAAATAGATGATAA
AGTACTTGAATAGGAACATAGAGCATTTTCAGTTTAAATAAATTTCAATTTGGTTATTTACGGAATCCT
TAGAATTAATGCCAGACATTTATAGATGATCTGTACCAACCTAGGTGTTAATATACACTTTGTACGGGCTT
AACTGGCTTAAATCTATAATAGAAAGATGACACTTACTGAATGTTTAAATATACACTTTGTACGGGCTT
TGTATTATTTCTATGACATCTTCAAAATGACCTTACTTCTTCTTCTTATTTTATAAGTAAGGACAGGAGCTTC
AAGAACATGACTAATTTCCCAAGGCTGTACCAAGCCAGAACCCAAATCTATAAGGCTTTTAAACCT
GCATTTCAAACTGCATCTCGGCCATCTTATTTCTACAGAACTTAAGTTAGAAAGCCAGATTGGAGTC
CCAAATTCACCACTTAGTAACCAAGACAACTTGAGGAATTTCACTCAACGCTTTTGAATCTTCAATTTCT
AATCTTTAAACCTAAACAATAAATCTTGTCTACCTATGTCTCAAGATTTCTGAGGCACATAGAGAT
AGTGTGGAAGAGTGTGTACAGATGTCAAGTGTAGCGTGATTACTTAGATCCCTGAACACCATGGATG
AATGTCTGTGACTGCTATTAGAGGTCATAAAGATATTGGGGCCAGGTACATTTGGCTTATTCCTATAAT
GCCAGCACTTTGGAGCCTGAGACAGGAGGATCACTCGAGGCCACGAGTTCAGACCCGCCCTGGGCAAC
ATAGTGAGACCCCTTCTCTACAAAAAAGAGCAGCCACGTGTAGTGGCACACACACTGTAGTCCACAT
ACTCAGGAGGTTGAGTTGGAGGATAACTTTAGTCCAGGAGTTTCAAGGTGCAGTGAGCTGTGATTGCA
CCACTGTACTTAACCTGGACAGCAGAGTGAGACCCCTGTCTTAAAAAAAAGAAAAAATAATAAT
AATAAAGAAATAATGGGGCTTGGGATACCCACTCTCTCTTCTGCTGTGAGTTGTGAAGCAGTTGAGT
TACATATGCATGTCCAATGGATGAGTTGAAAAATATCAACTGGATTGGAATGTGGCTTACTTGGCTGGC
CACAATGAGCTTCGTAAACACTTCTGTACAGGTTGAGAAGACAACTTCTCACCCAGTCACTGGCAGAG
CTGGACACTCTGTGTCTCTCCACAGAACAACTCTTACTGCGATGGAGTGGATGAAAAAGTCAACCGA
GAACAGGCTACTCCAAAAAGCAGAGCACCACCAAGGCCAGCTGGTCAAGTCCCCCTTCTTAAGTAAACA
ATCAGCTAATTCATTTCGGACAAAGCCAGAGAGGTTGTTGGAGAAAGAGAGGCGAGTTTCTCCCAAG
TTTTCTCTGGAATTTTATGGGAATATGAGGTTTAGGGGAATAAGACTTCCCTTAAACAGTGAAGAAT
CCCCAGCTCTATTGGTAATAGGAAATCGCTTACAAGGATCATGGGGAGTATTTCTCTCAGCTCGTTCTGC

D

FIG. 16B(4)



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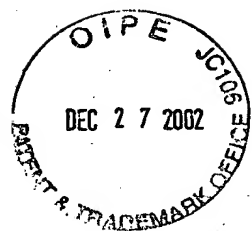
D

CTCCTACTTGGCTGAGTGGAAATGGAACCATCTGTGGCTGCTGCATATGATATTGTCAACTTTGTCAATTC
CACACCCACTCCTTGACGCCCTACCATGTGGTCATAAGACTCCCTTTAAAGTGTTCCTTTAAAAACAA
AATGTGTTTTGTTCTATAAAATACAGCTCAATGTCAAGAACCTTGTCTTGTGCTCTCTGATGTAAC
CCTTTACAATGTTTGGCAGCTTATTCTCTCTATTCCCTGTAGGTCCTCATCCAGGCCAAAGTGAGT
GCCAGCCTCATTTGGCAGCAGATGCCCTGTGGAAAGGCAGAGGAGACGAGACTAATTGTAACCTTG
TGATTAGCTGTCAATGCTGCTGTCAATAGCGCTCAATAAAGCCAGAAAGGCCAAGCGTTCCGCT
TCTGCATACCTGCTGAGTCAGATTCTCAGTGCAGAAAGGCTTTCTAGGCAGTCAATTTTAGAATA
TTAGTCTTGGTCTTAAGTGGTTAAATCCCTAGCTGGTCTTTAATCTGAGCCTGGAGAAATTTAGTTAT
GGCTGACATCTCTGCTGATATTTTGGCCCTCAATATATATATGCTCTTCTCCATCTCTTAGATCCCCTGA
ATCATAGAGATATATATGTTATATAATCAACTGTCTCCAGTCTCTAAGAGTGATAGTACACATTTGTGT
CAGGTTGAGGGACAGGAGAACTTTCAAAAGCCTTTCTTGCCCTTTTCTCTCTCACTGCCTCCCACT
AAGTCCAGCCACTTATTATTCAGCTGACACTATCATCATGACCATGAGGTCTTTTGGGGCTACCCCTGGT
TCGGATCCTTCTGGAGGTTTGTGCTTAACTCTGTCTTCACTGCTATGAGTGTCTTTTCAATAAGTTT
CTATTTTGGCTAAAGTTGGCCAGAACTCTCTTGTAAACCAAGAAACAAATAAATACCAGCTTGCAATGT
TCTATGTTGCTTCCACCAACTTATGCAGCACTTCTCTATCTAATCCACCTACTAGTCTTTTTTTTTT
ATTTTTTTTGAGACGGAGTCTGCTCTGTGCTCAGGATGGAGTGCAATGGTGCAATCTCGGCTCACTG
CAACCTCTGCCTCCCGGTTCAAGCAATTCCTGGCTCAGCTCTCTGAGTAGCTGGGACTACAGGTGC
ATGCCACCACTCGGCTAATTTTTGTATTTTAGGAGAGAGAGGTTTCAACCATGTTGCCAGGCTGGT
CACGAACTCCTGAGCTCAGGCAATCCGCCCTCCTCGGGCTCCCAAGTGTCTGGGATACAGGAGTGAGC
CACCTCACCTGGCCCCGACCTACTAGTCTTTAGTGTCTTCTCTTCTATTTGGGTAATTTGTCTGTTTAT
ATGCATGTCTTGTCTCAATAAATGTGGTCTCTCAAGGATTTGGCCCATGTTCTATCCATCTG
TAGATATCACAGCACCTAGCAGTGTCTTTACAGAGGAAGTACACAACCTGGCATTTATTGATTCTGCT
CCATTTTTCTCTTTATCCCCAGCATTTCTCAATAATTTCAAAACATCTCCATTGGAGTACCGGAGAA
AGCAGGTAGCTTTACTTGACGCTATGTTTCTATCCCCATAGTAACATAAAGAGGACCCAGAGAAACATG
TTTAAATGCTGTCTGTTATCAGGACCTCAGCCTTCTGATGCTCCGTGGCTTGGGGTTATTGCTTGAT
CATCTCTCCCCAACCTACACTGTGTACCTATGCTAGTCTCTTCTATGAGGACTAAGCCCCCATAGTAAAA
GGGCTAGATAAATAGAAATCATTTTATGTAATTATAAGAAATGAGAATACTGAGTATTCTGCTGTTTGT
TTAGGATAAGCACATCTTTATTGATGAGAAAAAGAAAAAGAGAGTGAAAAATATATTAAACGTGCATA
TTGTTCAGAAACCTTGGATTGCAAGTGACAGAAACTCAATTCAAACCAACGTAAGTCAAAAGGAAAAATA
TATTGGCTCATGTAACTTCTCACAGAGAGGCGAGGATGGAAGGGCTTTGGGAAACAAGAGAAATTGTTT
TCAAAATCTAGGAATACTAGGATTAGTCCAGGATGGGTACCTTCTCTGCTCCCTGAGGTGGTGGTAGCGA
TGGTAGAGTCTTATGGGAGGAAAGAGTGCATGTTAGGATGAAGGTAGGGCTAAGCAAAACAAGGGCAAGG

E

FIG. 16B(5)

E



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E
GCCACTATATCATGCTAAAAATGGTTTTTTTGTGATGCTCTCCTTAATTTACAAAAATGCTTCCAAACAAAG
TAGCACACAGGAAAAAGAACATAGGACTCTACTGGTGGTGCTTTTATCTTAAAGCCTTGACTTGCTT
TTACACAGCTTACTCACTGCTGTACCTGAGGCCATATGCCCTGTAAAAGCTTCTGCAGGGTTTCTACTA
AGCTGGGTTCCCTTATAIGGCTCCTCCCAATTTCTGTGGCTCACTCTAGTGATCTTTCTCTTTTCCCA
CCTCTGGGACTGGTGGCTGTTGTATGGACTGCCCTAGCTTGGCTTGGGTTTTTCTCTGGGACAAATG
TCTTCAGATTATCCTAGACCAATAAATAACAGCCACTGGGCCAGGCTCTCTCCCTCAACTGGAGCA
TGTTCCAGGGCTCTTCACCTTAGTTTAGTCAAGCATTTCTGGCAAAAGAAAGGCTAGTTAAACAATA
GACATTTAGCAATTGATTTCTTTTGACATGTTGTAAGATCTATTACATTTTGTAAATTAAGCATTC
CCTATGGAACCAACAGCACTAAGCTGCTCCTGGAATGCAGGTGGCTCCTCAATACAGGATGTTCT
AGAGAGCTGTAATTTGGGCACTTAACATATTCTCCACTACTTAGGGCACAGCACTGAAATTAACACCACT
AAGTTTGTCAATGTCATGTCATGTCAGGCACTGAGGCTCAGGAGTGGAACCTGACCTCTTATGTG
TGTCAGGCTTTCTCTCAGAACTCAGCTGTGTTTTCTGCTGACTCTCCATAGGAACATCAGTCCTG
AATCCTCAGACCACTCTGGAGTAGTAAGTGCTCCTGACAGTCTAGAAAGTTGTCTACCGCTGGATCT
CCAAAGCGTGTGACACACCGTGAGAGAGAAATGAGAAAGCTGGGCTCTTCAGGTAATCTTGCTTTTTC
ACAAGCCCCGTAATTTTACTGCATAATTTTGAATTCACCTGATAATTTCTACAAATTTTCCCATAAAGT
CATCTACACACAATACCTCTCATGCAACACTGGCTTTGCTAATAACATATCTATTATGAGAGCTGTGC
TTCTTAAGCGTAATGTTTATATGCACTAAGGCTCTTGCTTACATATAAAAGGGGATTTGAGCAATG
TGATACAGAAAGTCTTTCTCCACAGGCTCATATGTAAAGAATTCATTAGATTGGCTGAAATAGACTGA
TCTGTCCATTTCTCTGCTCACTTATCATAAGGAAGTCATTAGCTAAGGAACAAAACTACAATCTATGT
AATTAGAAGAACAAAGCTGGTTTTGCTCAATATAAAATAAGAAAAAGAACCATGTGAAAGTCAAAATA
TTTGTTTAATCAGGTCATTGAGAACTATTA: AAAAGTATTTGAATTTCTTATGATGAGAACTATCTTG
ACTCAAGTGGACAGTGGTGAAGCTTTTGGGCTGTGGTCCCTACGTAGAAAGGAGGCTTTGTCAATAAAGT
CTTATATGGTACAGGTGCCAAGTTAAGTGCCCAAGCTTGMTCTTAAAGCATACTGGATTTTGTGAAAGT
ACTTTTAGTGAAGTGAAGGAATAAAACAAATCCCTCTGGGAGAACTTCTCCCTCATCTTGGTGAAGTC
ATTCTGCCAGAAATCTATCTGGTAGTTACCTTCTCCGATTCATTAAATGTTGTCCCATGGTCCGACATG
GGTAATTTTCTCTCATTTGTGATTAGTTCCACTACAAGGAATTAATATTTCAACTTCTTGCCCTTCTGG
GATATACTCAGCCTTATCACAGAGCTCCTCCAGGGAAGGAACCTTAGATTCTTTGAAGAACTTCCCTGCT
CTTACCCAAACCGATTGAGTTGTTAATTTCTGCTCCACTTGTCTCCATTTTCAGTGCAGGAGAAAAAGCAT
TTGTGGCAAGTCTGACCTTACAAAGGCTGTTAATGCTCAATAACTGTGAGGACCTGCTATAAGTCAATG
CCTTTTAAGAAAAAATACACACATGCACACACTCAGCACAAAGACTGCAACACAACTGTGATGGCAGCTT
GCATATTGAACCAAGCTGTTTCCCTAAAAACATTTGATTCGGCATCCTTTGTAGACAGTAATGCAAAAGA

F

FIG. 16B(6)

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CTTAGGTTGGAAGAAGTGCATTAGGTTTTGATTAACGATTGGATGAGGGCCAGTTAAATTTTTTAAATCTG
AATGAGCTTGCTGACTCAGGAGCCTTAGCAGCATAAATGGACAGACAGATCCTCAAAAGCTTTTCATTTAAAG
GGTTTCTGGTAACGTGCTARAGAAATGAGTTGAAATACAAATCACTGAACCACTCAGCTTTCATCT
AAAACAGAATATGTAATCTCAAAGAACTCAACTGGTCTCTTGAATATTCAGGTAAATTAATGTAA
GAAGCTAGAGCTTAAATATTTTGAGGAAGGAGCCCTCCTGTAGCTTTGTGACTATATCACTTTATCCT
TTTGAATGCCGTATTTAATATGTTAATTTGCAATTTAAGTATAGCTGGAGTCACCGATCTGCTGAAAA
AAACTCTASAATGGTTTGTGGAGGTGCTCAGGATGTATCAGAGACTGATTTGATTTGCATTTTATTTT
TAACCTTAGTTCCTCTCTGAACCTCTGCCTTCTCATGTTGTTTTTTTWTGTTGTTGCTTAATACAGT
CATGTGCCACCTAATGACAGGGATATGTTCTGAGAAATGCATTATTAGGTGATTTTGCCATTGTGCAAA
CATCACAGTGTACTTACACAAACCTAGATGGCATAGCCCTACTACACACGCTGCTGCTATATGGTAGAGCCT
ATTGCTTCCAGACTACAAACCTGTATAGCATGTTACTGTACTACTAGGCACTGTAGGCACTGTAACTGG
TATTTGTATCTAAACCTATCTAAACATAGAAAAGGTACAATAAAAATACAGTATTATAATCTTATGG
GACCACTGCTATATATGCAATCCATCATTTGACTGAAACATTATGTGGTGCATGACTATAATAGGATCAA
ACTATGCCCTTTGCAGAAATCCCCCTGGAAAGCCTCTGAAACTACCCCTGATCTTAGAGGCAGTTTTATAA
ATCACGGCCAATGATTTCTCAGCCTTTGGGTTGTGCCAGAGATGTGTCCGCTCTCCTTTTGCAATGACCC
TAGAGGTAAGGTGCTCTTCTCTCTCTCTCTCATGAAAAAATGTAATGTTGTATTTTAGCTTCTT
TTCCAGTCTAGTAATATCTTGTAAATTTACAAGATTGTAGCGGTGCCCTCCAAAAGGGGATAGCAATA
GTTACTTTGAAAAATGGGTGAGTTCTTTGCAACCATCTCTGAGTTGAACAGTTCTTGTATAATCTGTCTT
CCCAGTTAGGCTGTGAGCCGCCCTGAAGGCAGCAAGTGATCTTTCACTCTTCTCTGATCTCCTCAGCCA
CTCTTCTGCCCCACAATTCAAAAATCAGTTACCAAGCCATTGTAATTCCTTTTCTGAAATGTGTAGTA
GACTCCCTTTTAGGGTATTTGCCAGTTTCAAAAAGACCCCTGCCCTCTTTTGAAATCTGTCTTGCAGCC
ATATATGGTTTTTGTGTTGTTTGTGAGACAGAGTTTCACTCTGTGCCCCAGGCTGGAGTGCAGT
GGTGCGATCTCGGCTCACTGCAAGCTCCCCCTCCCGGTTTCACGCCATTCTCCTGCCCTCAGCCTCCCAA
GTAGCTGGGACTACAGGCGCTGCCACCATACCCAGTTAATTTTTTGTATTTTAGTAGAGACGGGCT
TTCACCATGTTAGCCAGGATGGTCTCGATCTCCTGACCTCGTGATCTGCCCGCTTTGGCCTCCCAAAAGT
GCTGGGATTACAGGCGTGAGCCACTGCACCCGGCAGCCATATATGTTCTATATGACTCTTTCTGAGACA
ATAGCTGATTAGAACAGTATTAGAACTGTGATTTCTGAGACAATAGCTGATTTCTGAGACAATAGCTG
ATTAGAACAGTTGCCACGAGCTGGACCAATCATATTAAATTTCTCTATCTCTCTCTTTTGTCTCGAAA
TCTCAAATTTGAGATTCAGAAACAGCTATGTAGTCTCTGTTGTGGCTAGAACTGTAACATATGAACCCA
GAGCTAGAGAGATGCAATATTCTATCAAGCAGAGAGAGAGAGGAGGAGCCGGTCGGCACAGACGGAA
TGCAGTAGCACACAGAGAGAGCAGACACTCGGAGATGTCTGACACCTTTCTGCTTAGATTCCAGTCAG
TTCAGAGGCCCAGACGCATTCCTGTCTGGAAGCATTTCTGATCCTGTTTGTAAATCAACAATAAATCCC

G

FIG. 16B(7)

G

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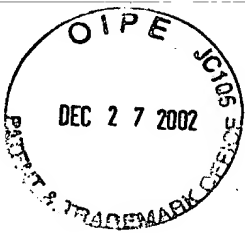


TTGCCACCCCTCTTTGCGTGTAGCTTAAGTTGTCTTGCTCTTAAAAATCTAAAGAGTTCTAAAAATGATAT
GAAATGTCTGTTATACAGAAAGTAGAATGACAATTTGCCAGGGCTGAGAGGAGAGGAAATGGAAAAATT
GCTCAATGGTTATAGTTTAGCTTTGCAAGAGGAAAAAGTTGTGGATATTTGGTGACACAACAATGCGAA
TATACTTACCACACTAGCTCTATGCTTAGATACGGTTAAGATGGTAAATTTTATGTTATGTATATTT
TATCGCTGTTTTAAAAAAGTTTAAAAATAGCCTGTTGTAGTCAGCTTCCTTGTCTTCTTACTACTGCA
GCCATATTCAGGTCCTCATGGCCCAAGGTATGGACAACCTGTAGTCACCAAACTGGTCTCCCCACTTCCA
CCCCTTGGAATTTGGTCCCCAGCAATCTACCTACATGCATGGAGCAATCAATATTACCCATAAAGCAC,
TAACGCTGTGCTGTACTCCAAAATGCAAACTTCATGGTGTCCTTGAATTCAGGATCAAGTTTCATAC
TCCCCAGCTTGTATACAGGACCCAGTGATCCTTTCCAACCTTCTGACCTACTGATTTCCAGTAGGAAG
CAAAACCTAGCAAGACTGGTCTGCCTCATCCCAGAACAGTACTTACTCATGCTGTTTCTTGCATGAT
TACCTTCCCTCTCTCCTCACACATCTTATCTTTCTTCACTTGATCTTAGTCCAAATGCCGAGAAAGCAAT
CTTATCTTACTTTCAAAGCCAGGTCAGACCCATCAATTTCTATAAAACATTTCTGACCACACTAGTCC
TCCATGGACATTTATTTGAATTTGAATCTTAGCATTTAAATATACACAGTTTCTTATTCTATCTGTCTT
GTTCTTCTGCTAGTTTATAAATTGCTTGATTTATAGAACATGAGCTTGATAATCTTTGATTTTTTCCTGGA
TACTGTGTTCTTGCTAGGCTGTTAAATAATGCTTGTGAATGAAATGAGAAATGAAGAACGGCTGCTTTA
CCAGTTTGTCTCTTCTGCCAACTTTTTTACATGGATTTACACCTCAACTTTTTTACACAATGATTAAA
TATACCTAATTTGATCATCCCAACAACACTAGTAAATATATATGATCATTTATCCTCATACTACAGATGA
GGAACACAGGCACACATCGTTTGTGTTGTTTTTTTTTTTGAGACGGAGTCTTGCTCTGTTGCCCAGGCT
GGAGTACAGTAGCACGATCTTGGCTCACTGCAACCTCTGCTCCTGGTTCAGGCCATTYTCTGCTCA
GCCTCCCGAGTAGCTGGACTACAGGCATGTGCCACAATGCCCTGGCTAATTTTGTACTTTTCAGTAGAG
ATGGGTTTCACTATGTTGGCCAGGCTGATCTCGAACTCCTGACCTGATGATCTGCCTGCTTCGGACTC
CCAAAGTGCTGGATTACAAGCATGAACCACTGTGCTGGGCCAAGCACACATAGTTAAATAACTTGCAA
AAAAAAAATAATCGTATCTATTGTAGGAGCAGAGTCGTGATTTCTGAGCTGAATCTATTTGGCTCCTA
AGCTTATGCTTTTTCTACAGTATCACCACATATCCCATCTATTTGTTATTTGTTGGCTTTATTGCTG
TTTTTCTGTGAATTTAACTTTCCAAAAGCAGGAATCTTATCTCAGTATATCACAGAGAAATCACTAA
GTATCTATAGAGGAAGGAAGGAGAAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG
GAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG
GAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAGGAAG
AAACTCTGGAAGGAGCTTGTCTTACTCCTAAGCTTGGTAAAGATCAGTCTTGCAAGGGCTTGACTAG
AAAAACACTGGCTTATCTCACTGAACCATATTCCCAATGTCAATTGACTCTTTTCCCCTGGGAGTAATTC
AACCATCTGTTCACTGTATGGATCAGAGTTGATGAATATTCTTGCCTCAGTCTCTTTTGGCCAG

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FIG. 16B(8)

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AGTTCCTTGGCTTCCAGCCTGCTCCTTGCTTGTGTTTGAACGAATAATATATGACTTTCCTTCTTAACCTG
GCAATGCTGAACCTGTGGCCTCTCTTAACCCTCAAGTCTCCCGATAAAAAGCAAAATATTAGATTCCGCT
GACCAGCGTACTCCTTACCCCGGCTGATTTACATGAAGAGCTATATATGGGTGGTAACATAGGTTT
AAGGATGGATGTCATATAAATCCTGGATACCGTTCCTGAAATATATACTATTGGGATATTCTTTGG
TTGAAGAGTCCCTTCACTACCAATGTCAGTCCCCCTTACCTATAAAATGGAAACCTTAGGTTGTTATA
AGGATTAATGAGTTAATGTGTATAATGTGCTTAGCACAGTACCTGCCACTCAATGCTATTATTGTTGT
TGTTGTTATTATTGTTAGTAGTAGCAGTAGTTGTGTATGAAGATGCATGATTTCCTGGGAAA
GGTAGCACATTAAGGCAGGATCAGTCATGAGTTACCTCAAGCAGATTAAATTTACTAGCCCTTTCATGCT
ATTTCCTCAAGGGATGTTTATCAAGTTGAGGAAGATGTAGATGTGATTTATGATGGATTGAGGTTAG
TACTGTGTATCCAGGTTGTGTGAGAGACAAGAAAGAACTGAGGGCACAGCTGTACTTAGGAAGAAC
TCTGGTTTGAAGGTACATAAGCTAATTCAGACGAGTTTAAACCATAGGAGATTGTTACAAAAGGCAC
TAGGTAACCTGCAGGGACAGGGAGCAGGGTGTCCACTCTCATTCAGATTCTTTTGAATTCGTATATT
TTATTCCTTTCCACAAACAGACTTTCTATCCACGGTGTGATGATAACCAATAACATTTCCCTCAGTC
TCACCCCTGTAGCTGTGTGACCAAAATGCAAAAGCTGTGCTTCTCCAGCTTCAAAATTTAATAAGAAAT
CACAGGCGAGAACATTTATTGGCTAGGCTGAGTTGCATGTCTAACCTTGGAGAACTCACTTTGAATAG
GGAAATTCAGAACTAGGATTGGTGGCTCCACAAATCTCACAAAATGGAGCAAAARTAGGAACCTCAACAA
ACAGAAATCAATAGATCTCCACTGGCTTTATAGTACGTGGTTCTGGGAATCCAGATATTACAGAGCCTAG
GTGAACCTGAACATTTCCCTTTAGGCAGATGGAATCCACGTTCTTTCTAGCTAAAATTTTTCATTCCTC
TTTGAGGGGAGTTTCCATGGAGAGGCTAGCTTTGTGGAGAGAGTGGGAARAAACAACTCATGCTGTTT
TTCATTGGGGACCATTTCTTATTGCTACTTTAGTCCAGTCCCTGCCACGGATCACACATTTCCCTTACT
CTTGTGCTTCTGGGCTTTTCTTTTCTTGTGCTGCTTATATTCCCTTCCCTAAAAGCTACTCT
ATTAAGAGGGAGATTAGGCAAGTAGGCTGGTTTGATTTATGTGCTGGTTTAAACCCATAATCACATAACCTC
AAAAAGAAAATGTCAGACACACTATAATAGCTCCAGATACAAAACATGAAGTACGAAGACCTCTTCAGA
AACTGCAGGCTTGCTACTCACCACAGACAAATAGAGCTGATTCTATTAGAACAGTGAGGAAAGAACAA
CAGTAAAGAAATGGCATTTAAGATCAATTTGTGGCAATGTCTAATTTTGTCTGGGAAGACCATGGCAGTGA
GGGATGCAAAAGGGATGACATCAAGTTTTCAGAACAGTGCCTATATGTTTAGGACGAAAGAGTTAAATAAT
GAGAGAAAACAAATGCAATACAAATTTCAATTGGCTACCTGGTTAGACCTAGCATGAACGTGTCTGTGAT
GGTGCTATTAAATTTGTGATGGAGACATTGGATATTGTCTTTCCCTATTGGTAAAGAGCTTGATTCAGGT
AGAGAGAAACAAATAATTATTTTACAGTGTACAAAGCACCTTTCTTATACGATATATTATTTTCATCCTCC
CAACTAGTTTGATAGGCAGTAATATTATTTCCCATTTTCACAGAGGGGGAACCTGGGTTAGGGCCCCAGGA

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FIG. 16B(9)



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ACTTGGCTGGTGAGTTTGGAAAGCTTGAATAGCAATGATTATAATCTTGGTGACAGAGCAGCCAGTG
AAATTCGAAATGCATATTTCTGTTCTCTACTTCCAGAGGGTCTGATTGAGTTTGCCTGGGAAGGGCC
TAAGAAATGGAATCTTTTATTACACACAGGTGATTTGAAGCATGGGGTCTACTGAGTATGCTTATG
AAACATTAACTTTAGGTCCTAGGCACCTGGCTTAGTTGACTGTGAGAACTGAAGCACAAAATTTGTGTGA
CCAAAGTTCTTCTGAGCCTCAGTTTCTCACCTGAAAATGAATGATGATGATGATAAAAATAACTAGGCTC
CATGCCAAGTGATTTACATATTTCCCTCAATCATCTTTCTTACAAAACCTAGGAGTTCCGAGGCATTG
TTGTTCTCTATGCTATGGGACTCAAAACCAATCATTTCTACTCACTCTTCTCTTCAATAATTGTCAGGAA
GATTAGACATAGAAAGTATCTAGCACATATTTCTGATGTTGAAGGAATAGCAGCAGCTGTTATAACTAC
TACTAAACTGACAAATCTGACCATACAGCCACCACATAAAATGYTGGGTTGAATTCAGATAATCTCTA
AGGTTCTTCCAGCTCCACCATACCTGATTTCAAGCATTTCAAAATATATGCTGATTTGTGGGGGGGT
TCCTAGAAAGAGTGTGGCAGTAACCTGAACCTCACTATACAAAAGACCGAAATTTCTTCTTAGTTGGAGA
TTTATTGATTTTGTAGTGAGTTTATAGACAAAACGAGGAAGATACAGAGAAAAGAGAGAATTA
CTGTGCTTTGATAGTGGCTATGGTGATTTTATTTTAAATTTTATTTTATACATTAAATGT
GGTTTCTATAACAAACACAAATTTAGAATAAAAGTAAGATATTTCTCTTGTGCTTCCAAATTTACCATAT
ACTTCTTAAATGATTTGTATCATATCATCAGCTGTAAGTTTACTATTAAAAAAATCAACAAAAGAA
CAATATCAGAGCTAAAGGACTTCAGGCCTGATGAACCTAAGTCTAGTTTCTGTGCTCACTAGCCTTGGC
TTATCCCAAAATATTAAAAAGTAAATATGATCCAATCTGCATCTCTTGACATGTCATGTTTGTAAAT
AGAAAGTTCTTGGAAACAATCTGTAAACATCGTTGAAGTACTTCAATCTTGGGCATTAAATTTTAT
CTTCTGTTCCCTCATATCATTTAAACAGTACCTTCCACTACATTCAGTCACTATGGAGGACTAAT
GCTCTATTTTATGTTGAACATGAAGCATAAACATGTACAGCTCTGAACCTGAGTTTCTCTTGCCTT
TAGAAATAAGAGGTGTTGATGAAGAGGAAATCCCTGAGACTCTGTAAACCTWACCTGCAGGTATGAGA
ATACAATCTGTGTTTWTATATKGTATTTCTTWAGCAAAATATAGTAAATTAGTATTTTCTTTTCAT
TTGCTCTCGAATATCCTTTAGTAACAGAGTGAACCTGTATGTCATATTTTGGGTTTAAAGAACATGG
TTACTGTAGCAAAAGAGGGCTAGCCCATGTATTAAAGTCCCTGGATTATACTGTGCTCACAGGAGAGC
ATGGGTTTGAAGATGAGGCTGCATAGTAAAGTAGGTAAAGTTTGGACCTTGGGGCCAAACTGCCTAAG
CTCAATCATGGTCTGCCAGTACTCTGTTCCGACCTTTAGCAAGTACTTAATCCTTGTAGACCTCT
GATTTGGTCTCTTCAAAATAGGATAGCAATAATGCCTGTCTTATAGAGACATTTGTGAGGATTCATGA
ATTGATATTTGTAGAAGAATATTGAGTTGGTTTGTCTAGAAGATATTAAAGTCCGAGTCTTTCTAAAT
AACTAAATGCTACAAAAGCAAAATAGCCATTCTGCAAAGAGCAGTGATTGAAGCAGGAAAATGCCCTG
CCTTCATAAAGCTTACATTATAAGGAGAGAAAAATAAGCAAAACAACTACGTGGTATATATGTAAAT
AAAAATAAGAGGGGAAGCATGGGGTGGGCAGATATTGCAGTTATAAATAGAAATGGTCATTGGAGGC

FIG. 16B(10)



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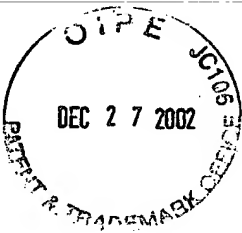
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AGATTAACAAGAGAAAAAGCATGCACATTTATTAATGTTTTTATGTATACATGGGAGTCTCAGAGAAA
AATGAAGACCCAAAGAAAGACTTTATGCCCCAAAGCTTATATACATTTTTTACACAAAGAATGATAAACT
GTGGAGATGTGACAAGACAAAAGGCCTTGGCTAGAAAGCAGTAAATGTGGAGTAAGGGATATACAGG
CGAAACTAGTGGAAAATGAGGATGATTTTAGTTTTTTTACAGGTCCATTTTCGATGATAACTCCAGTC
ATCTCTGGTGATACTATTCTTCTCTTCCCTGGCACAAAGGAGGCCCTTTCTCATGGGAAATTTTATGAC
CTGCTTTTGGTAGAAAAGGGGAAAGTCTGAGAGCTCTTCTCTGCCCTAGTGTTTTCTCAAGCGCCTTCAGC
TCAAAATAATCATTATGCCAAAGTGGCATATTTGAGGTGGCATGTTCTGAGCCATTTTCATGGGGTAAG
GATATTCAGGCTGAAGGAACTGGGAATGCAAGGCCCTTAGACAGGAACATGCCCTGGTATATTCAGA
GACATCTGGGAAGCCAAAGTAATGAATGACAGCAGAGCATGAGGTTGGGTGGCAGGAGATGAGGAGA
TGGTACAGGAGGCACAAAATCAGGCAGCATGTTATGATCACCGGCAGAGCTCCAGGTTTCATTCCTATC
TGAGTGACATGAACGGCCATCAAAAGTGTGAGTAGAGGAGTGACTGTGTTTAGAATGGACTGCAGGG
GAATAAGGTAGAAGCGGGAAGACCAGTTAGAAAATGTTAGAGATGATAGTGGCTTAGACCTGAGTGAC
AGCAGTAGAATAGGTAAAGAGATGGATTATGAGTGTCTGGCTGATTCACTCTTATATCCCCCTATGCTA
AGGCATCATGCTTGGCACATAGTAGGGACTCAATAAATACTTGCAGAGCGAATGAATAAATGGGAGTTC
AACTTGGGTAAAGGCAACTTCTCTAAGGCTCTGTTTCTCATCTCTAAAATGAGGGTAAGAAAAATATTA
ATAGATCTACCTCCAACGGTTATTGTGGAGATTAAATGAGGTCACTCCCATGCTTGCCTTAGCATAGTA
ACTGAAACATAAGATAGGGCTAAGATGTATACATACACATAAATAAAGCATTTTTCGAAGAGTTTAC
CTTTGGAGACATGGAGGAAGGTAGACTTTTATCTTCAATTTTATGAACATAAAGCAAAAGAAAGAAACA
AGTGTGAAATATGAGTCATTTTCAAGTTCTTTTGTACTTTTCACTACCATTTTGGAAATTTTCTCTATA
ATGAATATGCGAGGCAAGACAGAAATGAAAGGATAAGATCACTCAGAAATTTTCAGGTTTTTATAAGCA
TCAGAAATGTAAAGACTTTTCTGCTACTGCAATGGCCCATTTCTCTGACTCTTTGAAATGTGGTATTAT
TCTCATCTTTCTCCCTCCTCTCTCTTTTGGTTAAAGTAAGAGAGAGCTTTTGAAGCTATTATGGAAC
AAGAACACAGCCTAGTTTCATCCTCACATTTTGGAGCCTCTTATTCCTTCCAAAGAACACACATCTA
TTTAGTGGCTAAGAGTCTCTTGAGCTGAACCATTCATCACCATAAATCACTTCAAACTGTCTGAGGTA
TACATTATAACTAAGAAAATGGGTTCTCATTTGGAATTTACAAACTAAATATTCAAGAAGGGTTCTG
ATGCTTTTAAATAGGGGGCCCAACAAAGGTAAAGTAAGACATGTGGTTGAAGACACAGGAAAGGCA
GAGGTACCAGAAAAGTTGGTTGTACGCCTGATCTTAGGGCCTCATAAAGAAATAATATGGCAGAA
GAGCCCTAAGAAGCAAGCACTTTAGCATGGCTCTCCCTGGACAAAGTGGAGAGGCCCTTCCACCCTAAC
TTATCCCTATTGTCCTGGTCTTCAGTCTTTCTGCTGTTTGCCTTTCTGCTGTTGTTAATATACTTGTTC
TAAGGTTTTACCCCTGCTGACTTTTAGCTCTTCTTGCTAAGATTCTCTGGCTGTACATTAGAAAACCTCT

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FIG. 16B(11)

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GAGCAACTAAACACAAAAAATATTTGGCAGGGGGATAGGGGGTGCTTCTAGGCCCTAACTAAGACCTG
TTAAATTAGAGTCTCTTTTCGGGTGGCTCCTGGGCATTTGGGGTTTTTTTGTCTCTTTTCTTTTCTTTT
AAATCTAAAGCTTCCAGTTGATTCCAATATGTAGCCAGAATTGAGACCAGAAAGCTGTTAATACCCAA
GTAGTATACTAATAATTAATGATCATAATAGATTAACTAATGATTAATGAATGAACTTTAAATGTGT
AGCTGATTTAATTCTCAATGACTCTGAGGCAGTTACTATTATTATTATTAATGTACCCCTTCTACAGATGAA
GAATTCAGATACCAAAAAATCTACATAAATTTGGCAAAACAAGTAAATGCTAAAGTTGGAATTCAAACACA
GGTAGTTTAGTGTCGGAGCCACACTCTTCACCAACACACTGGTGGATTGCCACCTGCAATGTTAAAAA
ATCGCAGAGGATAGTGATGATACTGCAGACACACTGCCTGCATTTTATCTCCTCCTTGTAGGCTGAGC
CATTACATACCTCAGTGGTCCACACCTTAAAGGCAGGATATAAAGGTAATAATATGTACCTTCCTGATA
TGAACCTAGAGACTCCATCCCTCTTTTAAAGTAATGTAATGATTAAACAGCTTCTGTTATTCCTTTC
AGAATCTCATTATAGATAAATTCCTGGCATAAATTAGTATCATAAGTTTCTATTATTGCTCATTAA
TCAGTATGTATGATCAAGCAGTAAGAGTTCCCCCAACCCCAAGAAATGGTCTTCTGTTGTG
ACAAATTATCTTGGCAATGTAATTAGCCAGTTGGGTTATTGAGGGGATCCACTAGTTCTAGAGCGGC
CGCCACCGCGGTGGACTAGAT

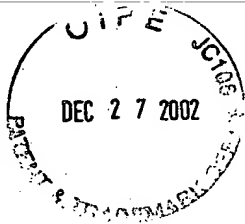
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CCTGTTAAAGTTTACCTTGATCTTAAACTTGCCCTAACCGGATTAAATTTCTGGCCAAATAGGGAGG
CTGAATGAAAGTTTACATAAACCTTAGATACTCCTAATTAACTGTTTTTTTATGCTGTTTTCTTAGGA
CACATGTTCAAGAGCATAATTAACTTTTAAAGAAGCTAGTAAGTACTGAAATAGTTTTTTAAAGTTT
TTTCTACAAGAATAGAGGAAGAAAGGAACATGGAATCTGAAGGGCTACTTAGCAAGCTGCTTATGGC
ATAATCTGGGGTGGGGTGATAGTAAGGATTTGCAATTTTACTGAGACCGATACATGTCAAGGGAATG
GTATTTAAATTAAGTATAGTGATGTTGATTTTCAAGGACTATAGCCCATCAACTACAATAGGCTCCAAA
AAATTCGTGTAATTAGCTTCTTGGAGCCTTCCAGTTTACCTACTATGTTATTTCCCACTATAAAATAT
TCTCAACTTTTGGGGTTTAGCCACTTAAGTTTTTTTATTTCTCTAATGTCTCTAGTATCTGCTTTAGT
TTCTGTCAATGCTAGACTCTGTGTTTCCAGAGTTTCAATCCATCTCTTCCAGTACTCAACCTCGTTGC
TTATAGTTTTCATTACATTCACTAGCAAAACCTTAATCTGTATGTTTGGCATAACCATAGTGCTTAGA
GCATTTTTCAGAAAAGAAATCCTGGAAAAATGGATCTTATCTCACCTGGGCCCTCAGGACTGCTGGGCT
GCCTGGTGTGAGCACTTCCCGCCATTTTCTATAGCACCAGTATTATTCTTAATACTTTAAAAAACCCACC
AGGCACGGTGGCTCACGCCCTGGAATCCAGCACTTTGGAGGCCAAGGTGGCGGATCACAAAGGTGAGG
AGATCAAGACCATCCTGGCTAACACGGTGAACCCCTGTCTGTACTAAAAATAGAAAAAATTAGCTGGG
CGTGTGGCATGCACCTGTAGTCCCAGCTGCTGGGAGGCTGAGGCAGGAGAAATGGCGTGAAACCCGGGA

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FIG. 16B(12)



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GGCGGAGCTTGCAGTGAGCCGAGATTGCACCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCGCTC
TCAAAAAAAGTAAATAAAAAATAAAAAACCATATCCCACATATCTCCCCCTTCTCTCTTTGGCCTGTG
ATCTTGCTGCATACTTATGGGGAATCTTAAAGATGTCAGATTTCAGTTCTCTCAGTTTCTACAACTT
CTCCCACTTTTGCCTTCTTATGTACCTTCCCTTCCATCTGATTCCTTATCAGTATTACACAT
GATTAGTTCTTGCCCTAACCTAATAGACCTTTCTTGAGTGCAATCAGTGGCTATTTTGTAGGGTAT
AAAAATTACCTATCTAATCACCTTGACAAAGTTACCTGTTATTTCCAATAACTTACTTCCATGGATT
CTTGATAGATTCTTTTTTTTTTTTTTAATTTTTTATTTTTCAGATGTTTTCTCGCTTTGTCAACCATGC
CTGGCCTAAATCTCGTAGGTTTTCTATGTAAACAATCAGATTTTCTGCAAGTATTAGTCTCCTTTCTA
ATTGTTATAATTTTAAATTTCTTTTTTAAATTTTTCGTAGAGACAAGTTTTTGTCTATGTTGTCC
AGCCTGGTCTTGAACCTCTGGGCTCAAGCAATCCTCCCATCTCAGCCTCCCAAGTGCCATTACAGTGG
CATGAGCCACTGIGCCTGGCCAAATTTCTTTTCTGTTGCGAAGGCAGACTTTTTCATAACAATACTGAAT
AGAAAGTATAGTAGATTACTTTATTTCTGATTTTCAAAAGGAATGCTTTCCGTTTCTCTCTGTTGAAGAT
AATTGCGTATTGTTTTTTTTTAAATAGTAACTTTATCAGGTTAAGGAAGGTTTCTTCTATTTCTAT
TTAAAAGGATTTTTTAAATCTTGAATTCATATGTTTTTATCTAATGCATTTTCTACATCAGTTGAAAT
GGTTGATGAACICTTTTAAATGGTGAATTAATTTATAGATTTTATGTTAAATAATCCTTGTATAT
CTTGATAAACTCAACTGGATCATGATTTATCTTTTTTATATGCTAGATTCATTTGTTGATACCTTTGT
TATGATTTTGAATATATATTATGTTAAAGTGAGCCTGTGATTTTCTTCTTGTAAATGTTTCTGTC
CAGTTTGGTGCTGGTTTGTCTCTCTCCTTAGAATGAGCTGGGAAGTCACTCTTGTGTTTCTCACC
TATAATAGCATCTGGGTCCAGTGTTTTTTATGTGGGACAAATTTGAACCTTGTTGTTCAACCTCTTTAAT
GTAAGAATATTCAGGCTTTTGTCTTCTGCGTAGTTTTTATTTCTTTTCTAGAGATTCTGTTCAAT
TTTCTTAGTTTTTATTTGCCATATAATTGGGATAATCTGTTTTTATCTGCTACTTCTGTAATATTTC
ACATTTGATTTATAATATACTTGTGGCCAGGCGTCTGGCTCACACCTGTAATCCAGCACCTTTGG
GAGGCCGAGGCGGATCACGAGGTCAAGAGATCGAGACCATCTGGCCCATGGTGAACCCCGTCT
CTACTAAAAATACAAAGAAAAAATAGCCGGCGTGGTGAGGACCTGTAGTCCCAGCTACTCAGA
AGGCTGAGGCAGGAGATGGCGTGAACCCAGGAGGCGGAGTTGCAGTGAGCCGAGATCGCACCACTGC
ACTCCAGCCTGGCGACAGAGCGAGACTCCATCTCAAAATAAAAAAATTTACTTGTGCTTCTCTTT
TTACCTGTTTGTAAATTTATCAATAAATACTACTTTTGGCTTTTGTCTTATTTATATAAATAATGA
AATCTTTTTCATTGATTTCTTTTTCATTGATTTATTCCTATAATCTTAAACAACCTTTATAATTGATGA
ACAATAACCTGTACACATTTAAAGTGTAATAATTTATTAACATTTTGTATCCATGATATAGCAGGAAATA
TCACCACAACAAGAGTGTGAACATATAATCTCTCCCAAGTTTTCTTGTGCTTTTATAATCACTGCC
TCTTGCCCTGCCCACTCCCTCATCCTTAAGCAACCATTTGTTCTGTTTTCTGCCACTATAGATTAGATT
GTATTTTCTAGAGTTTTATACAAGTGAATCATGTAGTATAGTATTAACCATGTGTTGTTGTTGTT

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FIG. 16B(13)

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FIG. 16B(14)

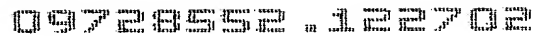
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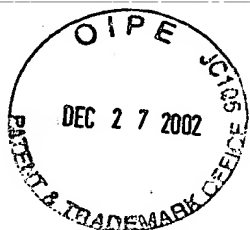
[illegible]

FIG. 16B(15)



AGTAGCTAGTTTCATTCTCTATATAAATGTTGTCTATGCAAGTGAGCTGCTCTCCAGTGCCCTTAGTTTC
ACTAATGTTGGGAAGGTCCTCTCTCTGTTTGGACTTCTCTATCACATTCGCTTCTCAAGAGAAAGA
CATATAATGAAAGTTGATATCTGGTGTCTAGGACTTCTCAGAAGCTTGCCAGTTTTTCAAGCTGATT
TCTCTCACTGGCAACTCTTCAGAGTGCTGTTCTACTCCACCCTCCCTGGTGGTATGTATCAGTTTTTC
TACTCATCAGCACCCACTACTCCTGCCACTGTGTTTCTCAGATGTCTGCTGCCCTGGCTAGCTCATTTG
CTGCTTTTGTCACTCATAGAGCTGTCTCTTCCCTTTTGTGGCTTCTGCTGACTTCCAGGGCAGCT
GCTCTGTCAATTGCCGTGCTGCCATTCTGTCTTTTTCCTCCCTACCCCCACAGATACAACATCTACTCT
AATACCACACATTCTCCATGTTCAAACTAACCTCATCACTTCCCCCACCACATTCCCCCAAAACCTGGTCA
TCCTCCAGCTTATAGCATTGCAGTTCACTGAAGTTAGACATCTGGGCTTGTCTTACCTCCAACATCTCA
TTAGCCTTCGATTCTACCCCTATAAATCCTCTCTCAGTCTCCTTTAGATATTCCTGCCCCTGCTGTGAG
ATCCATCTGGTTTATTGGCTAGATTACTTCAGAAAGCTTCAGTCAGTGACCTCCTTACTTCAAAACCCC
ACCAGTTGATCCTTCACCTGCCATCAGTCATTGCTTCTAAATCTAAATGTTCCATTTAACCTTGCT
GTGATAAAACCTTTGGTAGTTCTTCAGTGTGTTCAGTGGTAAGTTAAAACTTTTCACTGTAATGTACAGG
CCCCCTCATGATATGATCGCTGCCCTCCTCGAGCCTCATTTGTGTGATTTCCCGCCCCACCTTTTCCCTC
ACCCACCCTAGTCTTTTATGCTGCCATTTTACATTCATTTAGCAGATATTTATTGAAGCCCCCTGTG
ATGCTCTTACCTAGGCTTTTCTGTTGCCAGGACCAGACAGGCTTTTTCAGCTTCCAAGTCTCATCTCAG
TTTGAAAGACTATGTCTGACCTTGTCTTGGCCAAATTACTCTTTATCCTTCCAAGTTCATGATGTCTC
CACTGCACCTCCAAACAGAGTGAGAGCAAGACCCCTGTCTCAGTAAATAAAATAAAATAAAATAAA
TAAATAAATAAATAATCAGCCATAATTTATTTAATCATGTCTCTCTCCCCCATTTGATAGACGTTAAGG
GTATTTCCAGTATTCCTCTCTTGAAACCAATGCTACATTTGAATAACCTTGTACATGGGTCACTTTGAAA
GTATGGATATGTATCCGTGGAATAAGTTTCCAGAAGTGAATTTGTGTGAGAGGGTGTGCAATTTGTAA
TTCTGATGAATATTTATAGATTATATGAGAGTACCTGTTTACTCAAACTCTTGCCAAATGCAGCATTATC
AAAGTTTTTATGTTGCCAGTGTGATAGATTAAAAAATGGTATCTCAGCCAGGCGCAGTGGCTCACGC
CTGTAATCCCAGCACTTTGGAGGCTGAGGCGGCAGATCACGGGTGAGGAGATCGAGACCATCTCTGG
CCAACACAGTGAAACCCCTGTCTCTACTAAAAATACAAAAAATTATCCAGGCGTGGTGGCGGCACCTGT
AGTCCCAGCTACTCGGAAGCTGAGGCAGGAGAATGGCATGAACCTGGGAGCGCGAGCTTGCACTGAGC
CGAGATCGCGCCACAACATTCGAGCCTGGGCGACAGAGCGAGACTCCGTCTCAAAATAAAAAAAA
GAIGGTATCTCAGCATTGATTTCTTTGATCATCAGTGAGGTTGAGCATCTTTTCATAGATTTAAGAGAA
CTGTATGTTTTTTGTGAGTTATGTTTTATATCGTTTTACCCTTTTACTTTTAGGCTGGAAAGCAGCTGT
TTTAGTGAATGGTGGAAACAAGACCGAGATTGCCATGGAGAGACAACCTTTTCTAGAGATTTGGCTAT
GAAGCAGAGTAGAGACAATGATAGCTGAAGGATTGATGTAGATGCAAGAAATTTTTTCATCTTCTTTGA

FIG. 16B(16)



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GCAGGGTTCCTAAAGGACTGAGATTCCCTGGATGGAATTTACGGGAAGGGGAAAAATTTCTGGATATAGTG
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CAAAAGAAATGATTGAACGTGACACCAAGTTTCTTGATTTGGTAGAAAAGGAAATAAAGATAGAGCAGAG
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GAGTTCAAGACCGCCCTGGCCAAACATGGTGAACCCCATCTCTACTAAAATAACAAAATAGCCAGGC
ATGGTGGCACGGCCCTGTAATCCAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAACCTAGGAG
GCGGAGGTGGCAGTGAGCCTAGATCGGCCCTTGGCTGCGATCCAGACTTCACTCCAGCCTGGGTGACA
GAGCAAGACTCTGTCTCAAAAAAAGAAAGAAATCAGACTCTTAATATTTGTAAGAAAGTAGTCCCTTG
AGCTACTACTTAAGCTAGAAAGAGTTGATATCTTGTGTTTAAAGTGTAGGGCACTTTGGGAGGCTG
AGGCAGGTGGATCACTTGAGCCCGAGGAGTCCAGACCCAGCCTGAGCAATATGGGAAACCTTGTCTCTA
CTAAAAATACAAAAAATTAAACAGGCATGTGGTACGTACCTGTAGTCCAGCCACTTGGGACGCTGAGGT
GGGAGGATCACCTGAGCCCGAGGAATGGAGTTGCAGTGAGCCCAAGATTGCGTGACTGTACTCTAGCCT
GGGCAACAGAGCAAGACTCTGTCTCAAAAAAAGAAAGGGGGGATATCATAGTGCCATTATTATTAT
GAGTTTATGATGGCTTCTCTAAGCACCTTTTACATTCGGCATTTTATTCAGTACCTTAAAGCATCAAG
GAGTCCAGAAAAAATTTTATATATAAATATAAATAAATATGTAATATAATATATATGATATGCTTCCCT
ATCTCAGGAAGGAAATATGTGAACATCAGGAACCGAAGTCTACTAGTTACATGCCATTGGATATATCA
CACAAAGTGTGAGGAACTCAGAGGCTCATTATATCTGGGAGTGGGAAGGACAGGACAGAGATGTGC
TTTGGGAAGTTTAAATTAAATAGCAATGGGGAATGAAGACACACAGAGGACAGGCAAGCAAGA
GACATGAAAGAGTAAGTCATGTGTTGAGGATCTGGGATCCACTAGTTCTAGAGCGGCCGCCACCGG
TAGCAGTTACGG

Q

FIG. 16B(17)

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Q

Contig 4 (1241 bp)

TCGTGATCGGGTATTTCTCTACGCATCTGTGGGTATTTACACCGCATAGATCCGTCGAGTTCAA
GAGAAAAAAGAAAAAGCAAAAAAGAAAAAGGAAAGCGGCCCTCGTTCAGAAATGACACGTATAGAAT
GATGCATTACCTTGTTCATCTTACGTATCATATCTGTTCTGTATACATACTTACTGACATTATAGGTATAC
ATATATACACATGTATATATATCGTATGCTGCAGCTTTAAATAATCGGTGTCACTACATAAAGAACACCT
TTGGTGGAGGGAACATCGTTGGTACCATTGGGCGAGGTGCTTCTCTTATGGCAACCGCAAGAGCCCTTG
AAGCACTCTCACTACGGTGATGATCATTTCTTGCCTCGCAGACAATCAACGTGGAGGTAATTTCTGCTA
GCCTCTGCAAGCTTTCAGAAAAATGCGGATCATCTCGAAGAGAGATCTCCTACTTTCTCCCTTTGCG
AAACCAAGTTCGACAACTGCGTACGGCTGTTGAAAGATCTACCAACCGCTCTGGAAGTGCCTCATCC
AAAGGCGCAATCCTGATCCAAACCTTTTACTCCACGACGGCCCTTAGGGCCCTCTTTAAAGCTTGA
CCGAGAGCAATCCCGAGTCTTACGTGGTGATGCTGCTATGTAGTCACTCACTCAACG
ATTAGCGACCAAGCGGAATGCTTGGCCAGAGCATGTATCATATGTCAGAAACCTATACCTGTGTGG
ACGTTAATCACTTGGGATTTGTGGCTGTTCTGCTACTGCTTCTGCCCTCTTTCTGGGAAGATCGAG
TGCTCTATCGGTAGGGACCAACCTTTAAAGAGATCGCAATCTGAATCTTGGTTTCATTGTAAATACGC
TTTACIAGGGCTTTCTGCTGTCTATCTTTGCCCTTCTGCTGCTCATTTTCTGCTGCTCATTTTCTAGTATATC
TTCGAAGAAATCACATTACTTTATATAATGTATAATTCATTATGTGATAATGCCAATCGCTAAGAAAAA
AAAAGAGTCATCCGTAGGTGGAAAAAATAAATAATGAAATCATACCGAGGCATAAAAAATATAGAGT
GTACTAGAGGAGGCCAAGAGTAATAGAAAAAGAAAAATTCGGGAAAGGACTGTGTTATGACTTCCCTGA
CTAATGCCGTGTTCAACGATACCTGGCAGTGACTCTCTAGCGCTCACCAAGCTCTTAAAAACGGGAATT

R

R

Contig 5 (1701 bp)

ATAAAAAACAGTTAATTAGGAGTATCTAGGTATGTGAAGCATTCATCACCCYCCCTAYTGRCAAAAAWT
WTCGWTAGGCAAAATTTATATTWTAAGTAACTTTAACATGAACACTTCTTAAACTTTGGCTCATAATTT
CACAAAAATTAGGCTGCAAGTCACCATATTCATCAGATACTGGCAGACACTAACTTCTGCGGCTATGAC
ACCAAGCAATACTGAAATCTCTTATCTTTCCAGGGGGTGTTCATGTATTCAGTGTTCGCAAAAGAGTT
CCTGCTGAGCTAAACACAGTCCACTGTGCACTCTACGAAAGAGTCCATGAGACAAGCATGGGGAGGGT
AGGAAGTTTAAATACCTTTACAATGCCGTGGAGACGCTGGCAGTGATGAAAGCCTAGAAAACTCATGAA
AGGACCTTTTATGAGCAGGGTGAATGTAGAGCACAAAAAGCAAAAGTCAGATGACCCACTTAAAGCTTTGC
CTTTACTGATGAGAAATTCATTCTCATTCAGATTAGTCTCTCTAGAAAAAGCAACCTTATATAAGA
GTTGGAAAAATTAAAGATACAGGAAGTATAATTCTACTAAATTCAGTTTTCTCTCAAAATATCAGCCT
AAGTCCTAAGGTCTGTGGCCCAAGACAGAAAAATACAAGGCGCTGAGAAAAATATGCTATTATCTTGGTGT

FIG. 16B(18)



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AACAATCTGACTGTGGGGTTGAGGAAATTTAAGCTCTACAATCCATAGATCAGACCAGAAAGTTTA
GGGTAGTAATATTATGAGAGGAAATAGTTTCTTCTGGAACTTATATAAGCAAATAAATGGTAAACCT
GATTTGCAAGGTAATGACAGTCCAAAGTTCCCTCAAAGCAGAGAAACCACTTATTTGCTCATTCATCAAC
TAAGTTCCTTGTGTGCCAGGCTGGAGAGAGAAAGCAGCTCCTGTCTCAAGGAGCTCACATCTCAG
GCATCTTCTCACCCCTCTTCTCATGTTAAACCAAAACATTTCAAGTTTCATCAATGAAACTCTTCATCCA
GGAGGCAGATAAAATGGCTTCTCTTCAATTTTGATTTCACTCTTCTTTTATTTATTTATTTATTTAT
TATTTTCTGAGAAGGAGTCTCGCTCTGTTGCCAGGCTGGAGTGCAGTGGCGTGATCTCGG
CTCACTGCAACCTCTGCCCTCCCGGTTCAAGCGATTCTCTGCCCTCAGCCTCCCAAGTAGCTGGGATTA
CAGGCATGGCCACCCAGCCCGGCTAATTTTGTAAATTTAGTAGAGATGGGGTTTCACCATGTTGGTC
AGGCTGGTGTCAAACTCCTGACCTGTGATCCGCCCTGCCCTCAGCCTCCCAAAGTGTGGGATTACAGGT
GTGAGCCACCATGCCCGGCTACTCTTCTTTAAACAGAGAAATAAGATGGAATATTTTATCCCATC
TTTTCTTCTGTAATTAATAAGGAATACGAAGAACTTGACATAGTCTCTCTCCTCATGTGCTCTCTTA
CTTCCCATCCCAATTCATGTTTGTCTCTCTTTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT
AGGTAAGTACTAGTCCAAAACACAGAGCTACACCTGGAGCCTAGATTCACTGGTAGCAAAATCACTAATTTT
CTGAAGGTAATGGGAGAAATGGGGTGGGGGAAACTCATTA

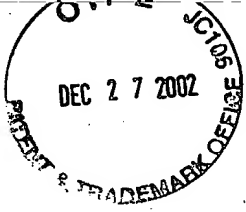
Contig 6 (1293 bp)

GGAGATAATAAGTATACACTATGTGTGAAGGGGTGTCTCTATTGTTGTGGCGATTAGGTGAGTAA
TTTTACACCTGGTTGTGAATAAAGTCCGAGATTGGGGACTCACGCTTTGTAGAGTCTCCAGGACAAT
GGGTTTTGCCCCCGTCCCAATTAATAGTTAAAGTTGGGGCTTTTCGATTCCCTTATTTCCAACTGGA
TAGGGCTCTTGAATGCCCCCAAAAGGTTGACCCCTTTCCCAACACGTCAAAGAGGGAATTTCTCCCGC
TAGACTACCTTGAACTGAAAGTGCAGTCCCTACAGGGTATTCTAGCTTGTAGCATCCCCCACTGTGA
ATCAATCCCTTAAATAAACCTATATAAGATGTATGTAATAGAGGACTAATCTTAAATATAATAAGCAT
ATATTTAATAAATTTCCGTACTACCCCTTATCTGGGGGGGGTGGGGGATATGTTCCAAAGACTCC
CAGTAGATGCCCTGAAACCCACAGATGGTACTGAACCCCTACGTAAACTGTATTTCAATTCCTATACATGCAG
GCTATGTGTGTAATCTGTAGGGTAACCACTAAAGAACAGGGTCTATAACTTGGCAAGAGGGGAAAAA
GCTAGGATAGTAAAAAGTCTATCAATCCAAAAAGCAAGAAAAAGAGAAAAAGAACATGCTGGCATA
TTATTATAAGTATTGTATTTTATTATTAGTTATTGTAAATTTTACTGTGCCTAATTTATATAAATTAA
CTTTATCACAGCTATGTATAGGAAAAATATATATCTGTGGTTTTAGGCATCCACTGGGGTCTTGG
AATATAATGCTTCCCCCAGATAAGAAGGTACTACTGTAATATATATATATATATATATAGTATACAT
AATTCTACTAGGTAGCCACATTAT

S

FIG. 16B(19)

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GGAATTGACTCATAATAGAAGAGGCTGGCAGGCTGGAGATTTCAGGGAGGAGTTGTCATTTCAAGTGCAAAA
GGCAGACTGCCAGAGAAATCCCTCTTGGTGGGGGAGGTGAGCCCTTTTGTCTTATTCAAATCTTTGAGG
AAAATAGAAAGCAAGAAATATATACTATATTAACAACAATAATGTTCCAAATTAATAACAATAATTA
ATAAAGCCTAATAATAAAGCCCTCAATATATATGCTGTTTAAAGAGAGACATTTTAAAGCTTAAAGGATAT
AGAAAAGTTGAACATACAAGCATGGAATAAAATAAGCATGCAAAATACTAG

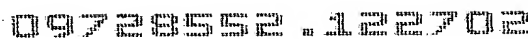
Contig 7 (3140 bp)

CTCGGAGTCCACCGGGTGGCGCGCTCTAGAACTAGTGGATCCCCCGAAAAATAAAAGAATGGAATAA
AATAAGCCATGAAATACTAGTATTAACACTGATGTCAAAATCTGACAAAGCACACAAAAAGAAAAATAA
CTTTAACTGCAAAATCTTAAATCCTAGCAAGAAAAAGCAGCATATGTTATATATACCACAACCTG
ATCAAGTAAGGCTTACTTCAAAAATTTAACCATGGTCCATTATTGGAAAAACATATTATAAAAAATCCTC
ACAAAAATAATTCAAAAATATAAAAGCCATATGATAAGCCTGATGAATGCTGGTTACAGAACTGGTTT
TCTTTAAAAAGGCAATCATTTGGGAATAAACCCGCTTACTCAGTATTACTATGTGCTAGGCCCTGTTC
CTTCTACTAGAAATAGTGAACAAATTTCAACAGAATCCCTATCTTCATGAAGCTTACAGTCTAGTAGCA
GAAACTGACATTAAACAAATCACCTCACAGACAAATAGGAGAAAGTATGGAAGAAAGAAATATAGGAC
TCTAAGAGCCTATAGAAGAAAGAAATTTGACCTAGTCAGGGAGCTCAGCCAAAGGCCCTCCCTAAGGCACT
GATTCCTGAGCTGACAAAGTAGAAGATGAACAGGAATCAGGGAGGCATTAAGGAGGCGCAGGAACTCCAT
GCCAGTCCGTAACTCAGAAAGGCGAGGAGGCTGTAAGAGAGCCACCCGTGTCTGAAGTATATAAGA
GTAAAGGGGAGCAGGTGCCAGGAAGCTGGAGATGTATACAGGGTAGGGCCACACAAGGGTGATTTTCT
TTGTCCCATAGCATTAAGAAGCCTTTGAAGAACAGAAAGCATGACAGTGACCTCCCTGCCCTGCATTTT
GGAATGAACACTTCAATTAGCTGGGTGTAGAGAAATATAGCACTGGATGTGGACAGTCCAGTTAGAAAGTT
ACTGGTGGAGACACAAAGTGTACAAGGAAGGAGATATTCAGGAAGTAAACTGCACAGGGGTGTGATAA
TAGATTTGCTCTTTGGGTGACAGGGAGTGCTGAATGCTACTCCTCTTTGGTTTCTGATTTACCTAACAG
ATGCCATCCAGTAAGTCAGATAACAGAGGAAAGAGACAAAGGCGTAGTGGCTCATGCCGTGAATCCCAG
CACTTTGGGAGGCCGAGGAGGTGGATCATTTGAGGTGAGGAGTTGAGACCAAGCCTGGCCCCCTCTGCT
GGTCTTGATTGAAGTCATTCGCACTGTAATCATCTAATGGTTTCATCTGGGACTGAGATTGTCTCAA
GCACATGCTGGCAGTTGGTGCACCTTGTGATTGGGCCCTCTCTCTTAACGTAAAGGAAGTGAGCCAAAG
CTTCTCACATTATGACAGAGTGTCCCATAGAGCCAAATGACAGCTGTAAAGTTCTCTTGAGGTATCAA
CTTGGAAAGACACACCATTACTTCTGCATTTTATTGGTTTAAAGCAAGTCACAGGGCCAACTCAAAATTA
GGAATGGAGAAATAAACTTCACCTGTTGATAGGAGTGGCAGTGTCTCACTGTAAAGGCATGTGTACAA
GGATGGGATTTTACGTAGCCATCTTTGCAACACAGTCTACCACAGTGTCTTTTTCCTTTCGAGTGCTTA

FIG. 16B(20)

T

T



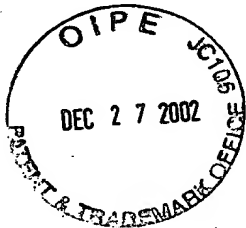
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[illegible]

Contig 8 (18073 bp)

AAGCGGTGCGCCGCTCTAGAACTAGTGGATCCCCGAGGAGTGAGGAGGACCTCAACCCTACTTCCTGCAAAATGGAGCTCTGAGATGTTGGAGTAGAAAATTGGAACCAGAGAGAGAAGTAAGGTAGTGTGTTGCAACATGCATTGTATATGGGGGTCGGGAAGTCACAGGAGTTGCCCTCAAAGTCTTCTCGGAGACGGATGAGGTTTCACCTGTGATTTCTCGTGTCTATGGATATAGTACCTGTTAGTGACATGGATCTTCTTAAACTCTGATGTGTCCTTTCCTCCCTAGTGTACGCATACCAATTCTCTCCACAGCTTCCATCACCATGCAATTTGTTCTTTCCCTTGTTCTGTATACCTTCTCGAAAGGAATTTTATGTAGGCTAATTGTTACCTCCACCCAGTATTTAACCCACTGGATATTTCATATGATTGATCTCTCTGATTTGGAAAAATAAAAAATGTA

FIG. 16B(21)



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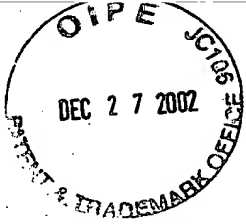
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U

ATCTCATATATATTCATTGATTAGTGGGACAGTCAACACTTCTTTGTGTATTTTCTTAGCTGTTCTGTT
TTTCTCGTCTGTAAATATCTGTTTAGGTCCTTCAGATTTTCAAAATTTGGACTGTTATGTTTTCAGTA
TTGTTATGAGTCTTGTTCATTTATGACAGTTCATTTCTTTTAAATAGACTTTTCTTTTTC
TTAGAGAAATAAGAAAAATAAATAAGACTTTGTGTTTAGAGAGTTTCAGGTTTCACAGCAA
AATTGATCAAAAAGTATGGAGAGTTCCGGCCAGGCGGTGGCTCACACCTGTAATCCAGCACTTTGG
AAGCCAAAGGTGGCAGATCACAAAGGTACAGAGTTTAAAGACAGCCTGGCCAAATATGATGAACCCCAT
GTCTACTAAACAATACACAAATTAGCTGGGTGGTGGTGACACACCTGTAACTGTACCTACTCAGGAGGC
TGAGGCAGAAGAAATCTCTTGAACCTGGGAGGTGAGGTTACAGTGAGCCACAGTCATGCCCTGCACCTC
CAGCCTGGGCAACAGAGTGAGACTCCGTCTCTAAATAAGAAAGAAATAATAGAGCATTCCTAAAT
ACCACCTGTCCCCAACACCTGCACAGCCTCCTCATATCCACATCCTACACCTGTGGTACCTTTGTT
GCAATTGATGGACCAACATTTGACTCCTCATATATCACCCAGCTTTGGTGTGTACATTTCTGTAGATTG
GACAAATGTATAATGACATGTGTCTACCATTTGTAGTATCATACAGAAGAAATTTGACTGCCCTGACAGTC
CTCTGCTCCACCTGCTTACTCCTCTCTCCCTTTTCCCTAACTGCACAACCACTGATTTTCTTTTCTTT
TTTGAGAGGGGCTCACTCTGTCCCCAGGCGGAGTGACGTGGGCCATTTGGGTCACCTGAAAGCT
CCACCTCCGGGTTAATGCAATTTCTCCGGCTCAGCTCCCGGTAACCTGGGATTAAGGGCCCCGCA
CCAAATCGGGTAATTTTGGAAATTTGAAGTAAAGGGGTTTCCCCATTTAGCCAGGATGGTCTCG
ATCTCCTGACCTCGTGATCCGCCACCTCGGCTCCCAAGCTGGGATACAGGCATGAGCCACCAAGC
CCTACCTTTTAAAAACAAGGTCTGTCTGTACCCAGGCTGAGTGAGTACATCACTCCT
CACTGAAGCGTCGACCTCCAGGCTCAAGTGATCCTCCACCTCAGCCTCCTAAATAGCTGAGACTACA
CACACACACCACCATGCCAGCTAAGTTTGTATTTTATAGAAATGTGGTCTTGTGTGTGTCTCCAG
GCTGGTCTTGAACCTCTGAGTTCAAGCAATTTGCCCTGCCCTTGGCTCTCAAGGTGTTGGGATTACAGGC
ATGAGTCACCGCACCTGGCCTTTTCTTTTCTTTTCTTTTAAACCAGTGATCTTTTACTGTCTCC
ATGGTTTTTACATTTGGCTTCTGTCACTTAGTAATATATGTTTAAAGTTTCTTCTACGTATTTTCATGTT
TTTAGCTTATTTCTTTTAGCAGTGAGTAATATTTTCAATTGTCTGGATGTGCCATCACTTATTTATCCAT
TCGCCGTGCTGAAGGATATCTTGATTGCTCCAGTCGTGGCAATTATAAATAAAGTTGCTGTAACATCC
ATGTGCAGGTTTTTTTAAAGTGGCATAAGTTTTCATCTCATTTGGTTAAATACCAAGGAGCACAATTGC
TGGATCATATGTAAGAGCTTATTTATTTTGTGAGAGACTACCAAGCTGCCCTCCAAAGTGGATGTAC
CATTTTGCATTTCCACCCAGCAGTGAATGAGAGTTCTGTCTCCATATTTTACAAACATGTAGTATT
GTCAAAATGTTTGGATTTTAAACCAAAATCCATTTTTCATAGATGTGTAGTGGTATCCCGTTTAAATTT
GCAATTACCTAATGACTTGATGTTCTGTGTCTTTTCAGATGCTTATTTGCCGACTGTTTATCTTCTTT
GGTGAGGTGCTATTTCAGGCTTTTGGCCATTTTAAATCTGGTGTATTATTTTCTTGTGAGTTTAAAGA

V

FIG. 16B(22)



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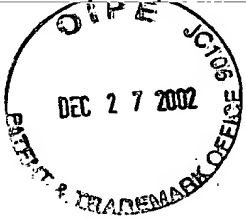
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V

ATTCTCTCCTTTGTGAGATCTATCTTTTGCAAAATATTTCTCCTAGTCTGTGGCTTATCCCTCTGATT
CTCTTGGCATTTGTCTTTCACAGAGTAGACATTTTATATTTTAAATGAAGTCCAGACTATCAATTATGTTT
TCATGGATCATGCCCTTGTATGTTATATCTAAAAAGTTCTCGCCATACCCAAAGTCATCTAGATTTTCTC
CTGTTATCTTCTTGGCATTTTATAGTCTTATGATTGATATTTAGGTCTATGATTCATTTTAGTTAAAT
TTTTGTGAAAGATAAAGGTCTGATATGGATTAAATTTTCTATATGTAGCTGTCCCGTTCCAGTATCA
TTTGTGAAAGACTATCTTGTCCCATTTTATTGCTTGTCTCCTTTGTGAGTTGACTATATTTATGTG
GGTCTGTTTATGATCTCTGTTCCGTTCCATTTGATCTGTTTGGCTTTTCTTTTGCTAAATACCCAGTCTT
AATTACCATAGCTTTAAAGTAAGTCTTGAAGTCCAATAGCATTAATCTTTGACTCTTTCTTTAATATTGA
GTTGCCCCCTTCAGAACTTTAATGTCTCTCCATGTAAACTTTAGAAATCAGCATTTTATATTCACAAAAT
AACTTGTGAGATTATGATTGAGATTGCATTGAATCTATAGGCTTATTTGGGAATAACTGACATCTTGA
CAATATTGAGTCTTCTGTCCATAAACATTTATTTATGATGGCTTCTTCTTTATGTTTAGGAGCTTTTG
TTTTTTCTGTGAGATATCCACTTCTACCTTTTATGATTTCTTAATTGCCCTTTTATGCTTAGAAAAGTTT
TCCTCATCTGAGCTCACATATTCATTTATTTCTTTTAAATGTGTTTCAAGCATTTTAAATTTTAA
CCTATGTGGAAATTTATTTTGGTATATGGAATGAGGTGGTGTAACTCCCTCCTCTCAAAATATGTAGT
TATTTTCCCAAAACCATTTTCTATTAATTTATCAAGAATAGACATGTATACATATACATATAAATAG
TCAGCCTTCCACTTGTGTTGACCTTGTGAAGGAAATTTGATGAGTTTCCCAATTTTGGATTAGGCTC
AGGTAGTAATTGAGCTGGGTTCTGCCAGAGATCCATGTTAATTCACATCCAAACAGAGTTATAAAATG
TAAGTTTATGAAAATCTAACAGTATATCACTGGTTTAAATGATCACAGCTAGGAAGAATGGGGAAT
GTCAAAATCTTCTGTGGATGCACCTGAAGGCCACTGTGAACCCCATTTCCCTGTAGGCACGGCTGTG
GTACCAAGGGCAAACTCCTGGAGTATATGAACCACTACATCTCCTTCTCTTCCCCCTTACCCCTTG
AGATTTTCATGTGTCCCTTAAGGATGTGTCTTCTTCTTCCCTTGGAGAGTCACTACCACATTTGAACACT
TTAGACTGTGAGTCTGTGAAGATGGGCTCATGAGTGTATTGCTCCCAAGTTGTTTCTCTAGCACTAG
CTCAGTATAGGGCATAAAAAATCTGAATGGATGAACAAACCACTATTACTGGTGGGACATGCTACTATC
TTACATGGTTCGAGGTGGAATAAAGGTTGAGAACAGCTATATAATGTGTTCCCTTGAAGGGCAGCAGTAC
ATCAGTGCAATCAGCCTACCTTCTCCATACCTTCTCACTCTGAAAACTGTAAAGCTGCACCTAGCAATCA
ACTTGGAGCTTTAAAGGGACTGTCTCCCTAGCTCTCACCCACAAAGCTGTAGTCTAGCACAGGTGACT
TTTTTAAAAAAGTTTTTGTCCAGATGTGATGACTCACGCCCTGTAATCCAGCACTTCGGGAGGCTGA
GGCTGGGAGGTCACTGGGTCAGGAGTTTGAGACCAGCGTGACCAACATGGAGAAACCCCATCTCTAC
TAAAAATTTGCCGGGATGTTGGCAGATGCCCTTAATCTCAGCTACTCGGGAGGCTGAGGCAGGAGAAT
TGCTTGAACCCGGGAGGCGAGGTTGCCGTGAGCCAAAGATCACACCATTTGCACTCCAGCCCCGGCGACA
GTGCAAGACTCCGTCTCAAAAAAATAAAAAAGGAGTCCCTATTAAAGACTTATTTTACAGGTTGGATA

W

FIG. 16B(23)



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W

TCTCTAATCCCAAAATCTGAAATGCTCCAAAATTTGAAACTTTTGGAGCGAGACATGATGCTCAAAA
AATGCTCACTGGGACATTTTGGATTTCAAAATTTGGATTAGGGACTAGGTGTGGGAGCTCACACCTGTA
ATCATAGCACTTTGGGAAGTTGAAGCAAGAGGATCAGTTGAACCCCAAGAGTTTGAGAGCAGCCTAGACA
ACATAGTGAGACGCCGTCTCTACAGAAAATTTTAAAAATTAGCCAGGCATCGTAGTACATGCCATATAGT
CCCAGCTACTCAGGAGGCTGAGACAGAGGATCACTTGAGTCCAGGAGGTAGAGGCTGCACTGAGCTAT
GATCATAAACCACTGTCTCCATCCTGGGCAACAGAGCAAGACCTATCTCTTAAAAAAAATCTGAAACAC
TGCTAGTCCTCAAGATAAGGATAGTCAGTCTTTATAAAGACTCAATTAGTTATTGGATATCTGAGGAA
GCATGCATATCAGGCTCCCAAAAGATCATTTGGTTTAGGCACACATTTTAATAGCTTGGAAATCCAGAAT
ACTCTTCTGGTGACCACTCAGACATAGTCCTGATAATATAGGACCTCATCTAACATGACTCCCTATTT
TCCAGATAAGCATGGATTCCTGGTTCATTTCTGCTCGGCAGTGGTCTGATATGTGTGAGTGCCA
ACAATGCTACCAAGGTAATTTGCTATTTGATAAGGCTGCTATTTGAATGAAATTTTGCTTTACATTT
TAATGAGCCACATTTGAAAACCGAGATGGTATTTGAAGAAAGGAATATAAAAATTTTATTCAAAGTGAT
GGTAAATAGGTGCTTCAGAAATCTTGGAAATTTGAATGCTCAGCATTTGTTTTTCATACATACATAACTG
CTTTAAATAAATCAAGAGATTAATGTTGTTCTTCTGAAAAGTAAAAATAAATTTGTGACATTTACAACCT
CTATATATGGTTTCTGAGGAATAAGTGAAGAATCTTGTCTTTCTCCCTTAAACCGTAGTCCCTTGG
AGGAGGTAGGAAGGTCAGCATGAGATAAAAACGTAGGGGTGGTGTGTGAGGGGATTTGGTCTT
TGCTTGGTCTCCATATGTTGAGAGTTTATTAAGGCTTGTGCTTTGTGTCTCACAGCTTTTGTAGCCTC
ACATTTCTCATGTGCTATTTCTTGTGTTTGGTGTGTTGTTGAGTGTGACCTTCTGTAGGAATTACAAGAT
TAATTAACCTCATCAACGGCAGAACCAAGTTAAAGAGAGGCCAAAACCTTCAAATCCAACCTTCTTCACTAA
CTTCTCTTTCTGTGGCACCAACATTCAGCCCAAAATATAAATCTGTGGACCCACCTATTTAACCACTGTCA
ATTCTTCAGACTCTGACAATGGGACCCACAAGAACAGCAAGCAACCAATCTATAGGCATTAACAATTTTCA
CAAATGGAAACGTGGCTTCCAGATAACCAAGTTACGGATGCCAGAACAGAACCCCTGGGAGGGGAATTTCCA
GCACCGCAGCAACCACTCCAGAAACTTTCCCTCCTCAGGTAAGAGATGATCTGTGTTGTTCTTTTG
CTCTTTGAGTTAGTCTTCTTTTATTATCTTGTGTTGTTTCTAGCCTTAAAAATTTCTTCAAAATAAG
TAAATTTGCTCAAGTGAAGTAATGAACCTGTATGTGGAATTTTGGGTTAGCATGAGTGAAGAGGAAA
GAAGAAAGATCTTGAGAAATATCTTCTGTAGGTGGATCCTGGTTAGATTGAGAGGACTTAAATGTG
TTTAAAGGTAGAGAAGAGGCTTAAAAAGACAAGAGAAATAGAGGAGCTCATTGACGATGCAAGAGACT
GAAGATGAAAAGATACAGAGAATGAGTAATAAGATTAGTTTGGAAAGGGAGGATCCGTGGAGACCAT
GGAAGGAGAATGGGTATTGATGTCCATGACAGTTAGATGTGAGATACAGAGAATGAGTAATAAGATTA
GGTTTGGAAAGGGAGGATCCATGGAGACCATGGAAAGGAGAATGGACATGATGTCCATGACAGTTAG
ATATGGAGTGCGCAGGCCAGTGGCCAGGGGTGGCATCAGGCTCTGGGAAATGGTTACATTTGCAGTGCCAG

X

FIG. 16B(24)

X



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X

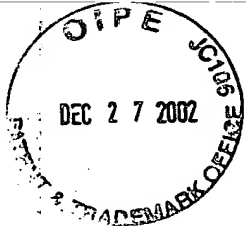
X

TTGTT CAGGG CCTCAGGTTGAAGCAGTAGTCCCAAGGAGAAATCAGAGACGTGGATCTGAGACCAAGG
CAGGTAAGACAAAGTTTCTGACCTCTTTGAACCTTAGGTACCTTGCTGTAAAGAGGATTAGAGATACC
CTCAAGGGCTTCTATGAGGAGTAAAGGAATAATCATTAACCTGATTGCTATGTAACGTGCATCCCTTT
TCTAGCAAAATCACTCTTTCTCTCTTTCTGTTCCAGTTAGATGGTGAAGTCCCTAAAGCAGAAATCAC
ATCTCGCTCATGTGGAACATTCAGGAACCTGTTTGCTCAGTTGATTCTCAATTTGTTACTACAGATGATAT
CTTTTACTGCGCTTATAACTCAGACCCCTTCACCTGCCAGCTTTTCCCATATATTTCTACCGTAAAGAC
AAGACAGCATTTGCAGTTAAGAGCACAGTCTTTCAGTGCCACACTGAGTTTGAATCCAGCTCTTCCATA
AACCAGCCATGTTTATGGCATAGCTGGCTTACTTTATCTCTCTACCTCGGTTTGTTCATCTGTGAAACA
AGAATGAGTGATAGTAATAGTTCTTACCTCATAGAGGAGATATTAGGATTAAACAAGTTAATATGGGTA
AAGCACTTATAAAGGTGCCCTACACATGGTAAGCACTATTTTAAAGTGTGAGCTGTTAGTATTGTTGTGG
TTATTGCTCTGATAGTTACCAGTAAATATATGAAGTACCTTTAATGCAGATGGCATCCCACTATTCT
TGATGAGATAGGGACTGCAGACAAATATGTCTGATACCTTGCTTTGTCTTTAGAGTTAATGTAGTTT
TGTCATAGTTATTACTGTGTGCTAGGCATCGTACTAAGAGTTTCTAGAAATAATCCTATGAATTAAGTT
CTATTTTATGTTTATAGGTGAAAGTATTTTACAATGATGAACCAATAATTTGTGGAATGTTTTTCAGT
GTACAGGTCATGACACAATTCATGAAATCACTTTAGCAGGCCACCACTAGTTGTTGTTTGTGTTTATTT
TTAATGGATGATCCAGTTCATGTTTATCTTTTAAATGTTACATAACAATTTTTTGAAATTTTAGTAACA
ACATAAAATGTTGGTTGTGGCCATTGCTTAGGGAGAAAGGCAGGATAAATGTACAAACTGTATGAGT
GAATGGAAAGGTGGAGACTGTAAACACAGGCCCTGACTGACTGAACAGCCCATGTTCTATTGTGACTGT
CTTTCATTTAACAGTTCTGTGACATGACCATGGATAATCATCTCCTTTTAAACAGATGCTTGATTTTACA
CTGTATATAGAGGTTAAATGATTGTTTGTAGATCTCAAGGCTGACAAATTAGGCCATTTCTCACCTTT
GCGGCTTTCCACTCTGCTTAGGGAACCTAGTTTCCATAAACTGACTTAGGTCCAAATGTGCCAC
AGCTAAGAATCTAGTTATTGTACATTTAACACAGTTCAAGTCATAGGAGGCTGAGACTATGTTTCTCTA
GTGGCGTTTATTCAGATGAGTAAACACAAAGAAACCAATTCGCACATGGGAATTTTCATAGTCTTAA
CCCCACATCCCACTTATCACCACCATTTACCAGTCCCTGTAACAGTTACAATTTTTTATTAATCAG
TATTTGATGTATATTTGTAATTATGAAATATTCATGCTGAGCTATAAGTATAAATGGATTGTTTTT
CTTTGACAGTTTTTTTCTGGATTTAATACTTACCTTATTTTTTGTGTTTATTTAGTTTCTATTTAGTCA
GGCCAGGCACACTGGCTAACACCTGTAATCCAGCACTTTGGGAGGCCAAGGTGGACAGATCACTTGAG
CTCAAGAGTTTGAGACCAGCCTGGGAAACATGGTGAACCCCATCTCTACAAAAAATACAAAAATTAGC
TGGGCATGGGTGCATGTGCTTAGTCCCAGCTACTCAGGAGCCTGAGGTGGGAGGATTGCTTAAGCCC
AGGAGGTTGAGGCTGCAGTGAGCTGTGTTTATACACTGCACTCCAGCCTGGGTGACAAAGCGAGACCA
TGCTCTCAAAAAGTTATTGCTACTCAATTTCTTACCATGCTCTCCAGAGCCTCTCAAAACAGCTTTCTAC

Y

Y

FIG. 16B(25)



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Y

AAAGTGAGATCTGTTAGATAATCTATTCTTTTACCTCTAGAAATTCCTCCTGAGCCCTCCATTGTC
TTATTCAGTCTAGGCTTGTCGATCTCTAGGGCTACTACAGATAACATCAGCCTGAGATTTCCCTTCT
CTGTCAATCTGGGAATTCCTGCTGCTGCTTCCGACTTCCATATGCTTCCCTTTTGTCTTCTCA
TCATTCGGTAGATTCCTGAGAAAAGGGTCCATGGAGGCAATTCATCCTTACATATCTAAAAATAT
CTTTAGGGCTGTGCATAGAAATTTGAGGAATATTTTCCCCCAGAAATTTTAAAGTAATGCCCTAACTGA
CACCTGTTTACCAGGTTTGGAGGATTTTACTGCTATCTTAATCCCTAAATGTTGTTGATGCTTTCTAGGA
TCTTCTCTTATCATCAGTATCCTGAAATTTACAGAGATGATCTTGATGTGGTCTTTTTCGTTTCAT
TATTATGGATACTTAATAGGCCCTTTAGAGCCTTGATCTTGCAATTTCTGAAAATTTTCTCCCATTTCTT
TGAAACCTTCTCCCCCTCTTCCCTTTTCTCAAAATCTTAATATTTGGATATTTGGATGTATCC
TGAATTAATCTTTAAATTTTCTTCTGTTGATCTTTGCTTTGAGTCTTTTCTCCTTT
TAAAAATAAACAAAGGCCAGCTAGGCACAGTGGCTTATATCTGTAATTCAGCACCTTTGGGAGGCTGAA
GCAGGAGGATCGCTTAAGCCCGGAGTTTGAGACCAGCCTAAGCATCGCAGCAAAACCTCATCTCTACA
AATGATTTAGAAATTAGCAGGCCCTAATGGCTCATGCTGTGTCAGCTACTCAGGGCTGAGGCAGG
AGGATTAATGAGGCTGGCAGTTGAGGCTGCTGCAGTGAGCTGTGATCGCACCCAGCTACTCCAGTCT
GGCAACAGAGGGAGACCTCATCTCAAAAATAAATAGGCCCTGGTGGTGGTCACTCCTGTAATCCCA
GCATTTGGGAGGCCAAGGAGGTGGATCACTTGAGCCAGGAGCTCAAGACCAGCCTAGCCGACATGG
CAAAACCTCTGTCTACCTACTAAAAATAAAAAAATAGTCAACGTTGTGGCATATACTTGTAAATCCC
AGCTACTTGGGAGGCTGAGACATGAGAAATGCTTGAACCTGGGAGGTGGAGTTGCAGTGAGTCAAGTC
CCTGCACATAGCCTGGGGAACAGAGTGAGACCCGAGACTCTATCTCAAAAAAAAATCAGTGACAA
GTAAAAAGGTAGAAATACCTTTTCTTTTCTTTGAGACAGTCTCACCTGTGCCCCAGTCTGGAGTGCA
ATGGCGCAGTCTCGGCATACCTGCAAACTCTGCCTTCAAGGTTCAAAACAATTTCTCCTGCCTCAGCCTCCT
GAGTAGCTGGGATFACACATGCCACGACACACCCAGCTTTTCTTTGATTTTGTAGTAGAGACAGGTT
TCACCATGTTGGCCATGCTGGTCTCGAACTCCTGACCTCATGATCCACCTGCCCCGGCTCCCCAAAGTG
CTGGTATTACAGGCGTGAGCCACTGCGCCAGCCTAGAAATACCTTTTAAAAATAAATAAATAGGCCGGG
CGCGCGGCTCATGCCTGTAATCCAGCACTTTGGGAGGCTGAGCGGGCAGATCAGGAGTCAAGGAGA
TCAAGACCCCTCTGGCTAACATGGTGAACCCCATCTCTACTAAAAATAAATAAATAAATAGCTGGGC
GTGGTGGCAGGTGCCCTGTAGTCCAGCTACTCTGGAGGCTGAGGCAGGAGAAATGGCGTGAACCCAGGAG
GTGGAGCTTGAGCGGAGATTGCGCCACTACACTCCAGCCTGGGCAACAGAGCAAGACTCTCTCT
CTAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA
TTTCCATTTATAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA
TCATACTTGCTCTTTGTTTAGTAAAGAGCTGCTGTATTGAAGGATATACCTTAATCTCTTTATCCAGT

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FIG. 16B(26)



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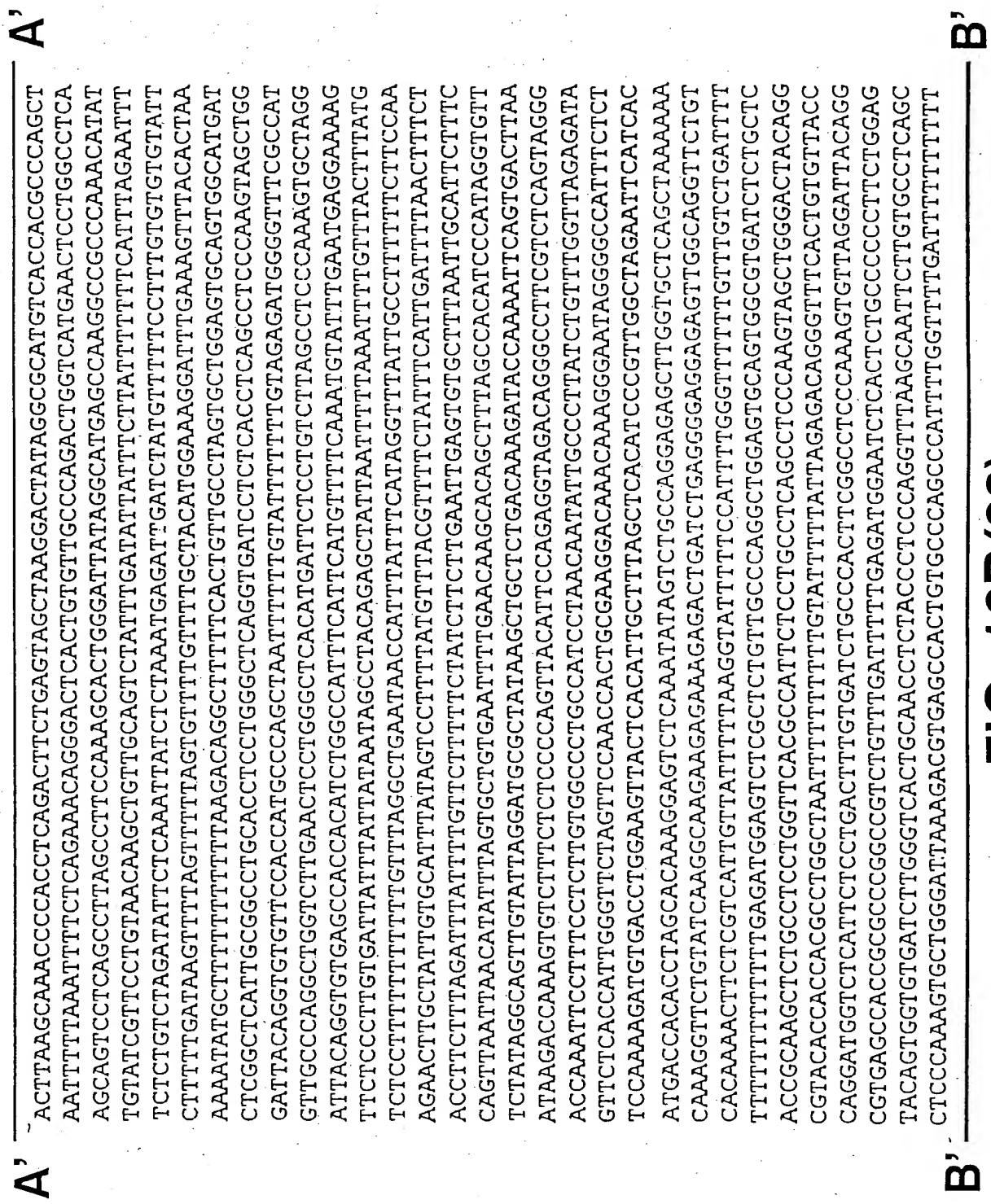


FIG. 16B(28)



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B'

TCTTTGAAATAGAGTCTCGCTCTGTTACCTAGGCTGGAGTACAGTGGCATGATCTCGGCTCACTGCAAC
CTCCCCCTCCTGGGTTCAAGTGATTTCTCGTGCCTCAGCCTCCCAAGTAGCTGGGATTATAGGCACCCAC
CACCACGCCAGCTAATTTGTTGTTATTTTAGTAGAGACGGGTTTACCATGTTGGCCAGGCTGGT
CTCGAACTCCTGACCTCAGGTGATCCACTGCACCCGGCTCATTTTGGTTTGGTTTATTTTCAAT
GTTTCTTACTTTGTCAATTTCTAATTTTATTGCAATGGGACAAAAGAAATATTGTACTCTTTCTACTGT
TGGGGTTTATAAGGGCTGTGGATATTTCACTCGCCTTTGAAAAGAAGGTTTCTCTGTAGTCTGTAGA
GTTTGGTATGTACCAATTAGATTTTATTACTTATCAATTTTGGTCTTTTGTATCCTTACTTAATTTTGT
CTCTTGAATTTTAAATGGAGCAAAAGACATAAAGTCTCTAATAACATGCGTTCTGTTTGCATTCTCAT
CTTTTATGAATATTGATGCTGCATATTTGTGTACCCAGGGAGAAGGCCAGACCCACTGTCCAAAGTTT
AGTGAATCTGGCAGCCTTGTTCAGTTGTTGGAGGATGCCCTCATGGAGGAAAGCATTCCTAATCCT
GGAGCTTGTGTTGTACTCTAATTTGAATTTGTAATGTGTTTCTTAACTGAATGAATGTTTCTATTT
TTTACTTATTACACAGGTAACTCTGACTCGAAGGACAGAGAGTGAGCTGCTCACCTTATATCTGTTG
TTCCCTTTTACACAGTGTACAGTATTCATTTATTTCTCTGCTCACAGTCTGTGGTAACCGTGTGCATCT
GTGGCTGTGTTGTTTACTTTCCCTTAAAGTTATTTCCATGTTAATCTCATGGAGAGAGCAATAGA
AACAAAGTACTGTATTGATGTTTCTTAAATATAGACTATGGATTCTAACAGCTATGATGATTTTAAAC
AAGTAACAAATATATCTTACTTTGACATGTCACTTTGTTAAACATTAATTTTGGTGATATTAGGTCA
AATTTCTATACCATTAGTTACTTCTGATTTCTAGGCCACAGTCCCTTTAAATATTTCTTGTGTTGTTT
TTCCCTTAGTGATAAAATGTCAACCTTTTGGCTTATATGGATTTTATGGATTTTCAGCCCTTAA
TGTAAGTCTCTATGGCCTGAGATGTTGTGCTGTTTAAAGCTGGACTGCTGAGTCCCTGGTCACTA
GAGAGTAGGGGACATGGGTACTTGTCTGCAGAAAGTGTGGCACATTTTGCCTAGAATGACAGTAAGCT
GCTATCAAAGAGCATGAGAGAAAGAGAGATCATCTAACATTTCTAAGAGTGATTTATACATTTGA
GTTTAAATGTTACTATTGAGAGCAGTGTGTTTATCATATTTTCTATTTTATCAAATCAGACTTGA
GTTTCTTCTGATTCTGTTATTTAAACCATACACAATTTTCCCTGTGTAATTAAGTAATGGAACACTTG
GAGGCATATGAAGTCCCACTAAGTAGGGAGCATTTGAGTCAGAAAAGTGGGTACTCTCTTCTTTATGT
GATGTCCATCTGCCATTGTATTTGGTAAGGAATAGTGAGGTGTACCATACTGTGTACAGATTTCCTC
ACTTTTCCACCTCTCACTTTCCCTAACTTGGAACTAAACATTTGGATTAATACAGTGTCTTTGCTGTT
AGATTCACTTGGCAGATTTTATCAAAATGTAGACTTAAATAGGTTTATTTGTGATAGATATTACTTGCT
CCCTAAACTGCTCTCTTAAACAGCCTTACAATAAAGTCAAAAGTCAAAAGTGGTAGGCTTCAAGATGAA
ACATAAGATCTGTGACTCCTTCTCTATTATTAGTATATATTTTCAATAATTCAGCCTTTTCTTGCCCC
AGATATCATATCTATTTTACCTACCAATATTAAAGTAGTTTCCATGTTGTGATTAAGAAAAACAAAT
ACCATAAATTACCTAGATTATTGCTAATTTGTGACATATGTAAAGTCTATTAAATGTAATAATCTCCTTTC

C'

FIG. 16B(29)



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C'

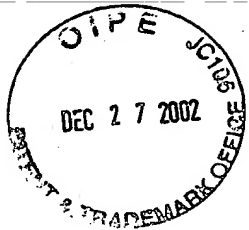
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TCTAAGTCCCAAAATCTAATGGCAATTTTACCAGAGCAGATCTTTAGAAAGTATTGCTATATAAATTTGGA
TATCCCATCTAATTTTAAGCCAAATGCTTTTGAAGAAATAAGCCAGCTGTTTGGAATGCTTGTATTA
TAATCGGTTTGATAAGCAGTTATGTCTTATGCAGATGAATTAGGGGTACCTGTTTTTATGCACTGGTC
TTTGGGGTGCTTTTGAACAGTAGTGTCTGATGTTTTTAATTGTCAAAGCAAAAAGAAATGAGAGGGAGGG
CAACTTTTCTCCTCTTCTGAAATCCAGGAAACTGGTTATTTTCTCATGCCATATGATTTTAAAAATATA
TTCCAGCCAGGTGCAGTGGGTACGCTTGTAATCCCAGATTTTGGGATGCCAAGCGGGGGGA

Contig 9 (7505 bp)

TCCGAGCTCCACGGGTGGCGCGCTCTAGAACTAGTGGATCCCTCTGGTGGCCATTGAGAATCAAA
ACTTGCAGTGAGTGACTCTATAAAATGGAAAATTTGAATCAAGTCTGAAAATGATCCACATAGTTCTACA
GCAGGCTGGACACCGGTGGTCAGGACCTCAATATATTCTGCTTCCACAGAAATTCAGACAGTTCAGAGTT
TGGTGAATTAACCTCAAAGGCAGCAAGATATCTGTCCCGGAGTCAGCAGGTAAAGCATAGCAGAAATGG
CTGGAGCAGCGGGAGCCTGCTTCCCTTCTGTTGGCTGTAGCGTCCACTCCATTATAGCTCCTGATGGA
AGATTTCTACAGAGTGATGCCCTCAGAAATCTTCCCTTATACCTTTCTTCCATGATCCTTGACCTCTTTT
CTAGATTTGCCACATCTTATGTGCAAGTAACTAGATATACATTATCAGACAAGCTAGCAGACCTGCA
TATATCCACTTCCCTACTTTTCCATAAATTTCTTCACTGAACCTCTATCATTTCTTCTTCTGTGTT
GACTCTGGTGTAACTTGCAGGCAAGTTGAGCGTGGGTTTGGTGTCACTGAAGGACTAAGGGATA
GTTAGCCTTCTATTTATTAACAAATCTTCCCTTTGATGTCTGGATCAGTGTCTCTCTAATAGGAATAT
TGGCATGTTAAGGCAAGAACATATGCTTATTGAGTGTGACTGATTTGGGTTAATACTAATTTGATAC
TATTAAGGTGTGGGCCCCAGGAATGCCAAATTTCTACCTCAATGTAGAGCCACCATTCCCTTGAGTA
ACCTAGGTGGGATAGATATACGTGAAGGCTAATGGAAGATAGGAATCAAAGTATCACTTTATTTT
TATTTTATTTTATTTAATTTTGTAGATGGAGTCTTGTCTGTTGCTAGGCTGTAGCGCAGTGGC
ACAATGAAAGTATCACTTTATTTATCTGAGCTTGTGCCCTAAACTTCACTGCAGAAATATGCTGGTAA
AATGGACTGGATTACAGGATTTAGAGGCAAGGTCCACAGGTCAAGGATAAGAGGTAAGAGGAAATCTT
TCTCTCTTCTAAGCCCCAAACCTCCATGACAAATTTGAGATTTAAAAAATAAACTGATGAGAGAA
TCCAAAGCACAGTTGATCAAGAGGAAAGAGAAATGATGATGTTTCCCTCTTTCTTTTTCATGAGAAAGT
GGCTCTCTTATGATCGGCTACTTGATTAGAGAAACAGTGGGGGAAAGAACTGCCATATCCACATGTGC
AATTTTAAACACACAGTGATTCTGAACACTAGTATAAATTTCCAGTCAGTGTCTGCCCCATCTGAC
TACTCAGGTTATAATACCTAATTTTACAGGGAGTTGGGAAGTGTGCCAAACCTGTAGAAGTCTATAT
CTACTGTATTCAGATTTTATATGCATTATTTATATAACCTTTTGACCTCTCTCCTCTATCATCACTTG

D'

FIG. 16B(30)



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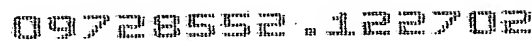
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D'

AGTGATTTCATCCAGCGTCATCATTTAAACATATTTTAAATAAATCTATATACTGATAATTCACCAATTT
ATATCTCCATCCCCGATTGTTCTCTAACCTCCAGCCTCTAATATCCAACTGCCTACTCAAGCCTCAGC
AATGGTGAGCGCCCTGCCAGCCTCGCTGCTGCTGAGCTCGATCTCAGACTGCTGTGCTGGCAA
TGAGCGAGGCTCCGTGGGCTGGGACCTTCCGAGCCAGCGCAGGATATATCTCCTGGTGTGCTGTCT
GCTAAGACCGTTGGAAAAGCACAGTATTAGGGTGGAGTGACCCCAATTTCCAGGTGTGCTGTCTCACA
GCTTGTCTGGCTACGAAAGGAATTCGCTGACCCCTTGCACTTCTCTGGTGAGGCAATGCCCTCGCCCT
GCTTCGGCTCATGCTCAGTGGCTGCAACCCACTGTCTGCAACCCAGTGTCCGACGAGCCCCAGTGGGAT
GAACCCGGTACCTCAGTTGGAATAACAGAAATCACCCGCTTCTGTGCTCCCTCATGCTGGGAGCTGTAG
ACTGGAGCTGTTCCATTTGGCCATCTTGGAACCTGCTTGCACTTCAGTTTAAATATCCAACTGCCTAT
ACGATATCTTCACTTGGATTTTGAATAGGCATATCAAACTTGTCACTGTTCAAAAGTGAGGTTCTAATCT
TCCCTCCCAAACTGCTTCCCATGGCTTCCCATCTCAGTAAATAGGAATTTTCATCCTTCCAATTG
CTCATGCCAAAAATTTGGGAGTTATCCTTGACTCTTCTCTTCTCACACCCACATTCATCCATCACC
ACATTTCTGATGCCCTCTATCTCAAGATATACTTAGACTTTCACCACCTTTCCTCACTCTGCAATTACCA
CTTTGGTCCAAAGCCACTGTATCTCTTCTTGGATTATTGTAATAGCTTCTTAATAATTTGTCCCCCTT
CTTCCACCTTTGTTTCCCTACAGTATAATCTTAACGAAGCAGCCAGAAATGGTTGCCTACAAACCTTTA
AAATGGTAAGCCAGAACATGTAGGTATATTCAAAACCTTCCAATGGCTTGTCACTGGAACATAAAGTCTC
TACATTGGCCTATAAGACCCCTATGTCTATACCCCTAGTCTCCTCTTCTAACTTCACTCTCCTGCTAT
GCTGTCTTCAACTCACTCTGTCTCAGGTGCTCTGGCCTCTCTCAAAACACACACACACTTGCAGCTC
ACAGTCTTGGCACTTGTCTGTTCTTCTCCTCTAGGACCTTCTTCTCTCAACTGTCTGGTTCAACCCACC
TTCTTCTTGATTTCTGCTCTGATGTCTATTTATCAGTGGGCACTTCCCAATTTCTCTATTTAAGACCA
CAATTCAGGCGCCAGGTGGTGTCTATGCTGTAATCCAGCACTTTGGGAAGCCGAGGTGGGCAGATC
ATGAGGTCAAGAATTCGAGACCACTTGGCCAAACATGGTGAAACCCCATCTCTACTAAAATAACAAAA
AAATTAGCCAGGTGTGGTGACATGCCCTGTAATCTCAGCTACTTAGGAGGCTGAGGCAGGAGAAATCGC
TTGAACCTGGGGGCGAGGTTGTAGTGAGCCGAGATTGGCCACTGCACCTTCACTGGGCAATAGAG
CGAGACTCTGTCTCAAAAAAATAAATAAATTTGCTGTTATTTCTCTATACTATTTTGTAAAGGCAAGGAC
CTTATTATTTCTCTGATAATACTCTCACACTTTATAAATTACATAATTTGACTTTGTTGATTAAATGAAT
ATCCCTCCTTTATAGCATAAATTCACAAAGCAAGGATTACATGTCTGCTTCACTTCACTGTACACC
TAAACCTAGCACAGGCTCTCACACATAACAGGCACAAAAACAAATGGATTACGTTGAGCCAAAGAA
CAAAAAAATAAGTAATTTATCACTAAATGTCTTTGTTAAATTCCAACACAGGGGCGAGTATATCAGG
TATTATAAGAAAGTAATTAGGCACATCCAGCACTTTGGAGGCCGAGGCGGTGGATCACAAAGGTGAG
GAGTTCAAGACCAGCCTGGCCAATATGGTGAAACCCCGTCTCTGTCTAAATAACAAAAATTAGCGGGTGT

E'

FIG. 16B(31)



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GGTGGCACACCCCTCTGGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGATCCCAGGAGGC
GGAGGTTTCAGTGAGCCAAGATCGTGCCACTGCACCTCAGCCTGGTGACGGAGCGAGACTCTGCCTCA
AAAAAAAAAAAAAAAAAAGAAAGAAAGTAATTAGGCACCTTTGGCTTAAGACACTGGGCTAAATCC
ATGAATTTACTTTCATCTTCCCCCAAAGCACACATGACATGGTAGAAAGAAATATAAAAAATACTAATGAATC
AACAGCATATCTGAAGGCAGCAACCGGTGGCATATGTAGATCAGAATCTTTGAGAGATTTCTGGAAGA-
CAAAACAGACCAGACTCGATGTCCAAGAGATCAACAGAGCCAAAGAGCCTCCAGCTGAAAACTAAGTA
CTAGTTCTACCAGTTTGGGCCCTGAAACACCTCAAGCTCAGAGGGAATTGGGACTGGGTTGAAAGTGG
ACCTTGAGTACCAGATGGTACTTAAGCAAAAGGCCTGCCAACCCAGCACCACTACACCCACAGCCCAA
ATGACAAAGGGGCTTCCCATCTAGACTCAGCTGGAACCAAGTGCCTACACAGAGTAGAGAGTTTGT
CACAGAGACTGGTAAGGGCTTCTTTTACAAAACATATGCTGCATATATATTTCTCAACGTCACACT
AATGACATTTTGGGCTATACAAATCTCTGTTATGTGGTCTGTCACTGTGCATGTAGGACATTTAACAA
TATCCCTAGCCTCTAAATTATTAGATGCTGTAGCAAAATCCCAATTTTGATGACCAAAAGTATCTCCAA
GCATTGCTAAATGCCCTTTGTGGGGAAATAGCCCCAGTAAGGAAACCACCTGGTCTATACTCAGGCCATT
CTAACTGAATTTTAAAGCAATCCGAGACCTAGCATTTCAAATGCAATTACTTAGGTATGTATCAC
CAAGAGATCAAGATTTCTTAACATAAACATAATACTATTATCCAATTTAAAAAGTAACATAATTCCCTTA
GTATCATCTAATATTATTCAGTTACTGCTTGAATTTCCCTGAGTGTCTCATAAATGCTTTTTTTTTTGT
TTGGTTAGAATTGACACCCAGAGCAGGTCTACACTGCATATGATTGTTAAGTATATTGGGTCCACAGAAG
GTCTCCTGGGGCTGCAGACAGAAAAAACCATAGTAGTCCCCAAGCTAATTTAGGCAACCCACAAGAG
AGGAAAGGAAAAAGAAACGGCAGCTCGCCTAGAGGATAACTGCACCTGCCCGATTTCCTCTGAGCCA
TCACTGAACCCCTTCCCTGGTTTAGGACGTATGTCATGTTTGTCTTCTGAAGGGATGAAGGGACACCTA
TTGTGAGCACAGTCTAAGCCACTCAATGGTCCAGGGCATAGCTCAAAACAGAGCAACAGTAGCCCTGGGA
AATGGAGGTGACAAAAGAPACAGAATAAATCTTTCAAAATATACTGCAATTTGTGCAACAGGATGCCAT
ATTGATTTAAAAAATTTTTTTCTTAAATTTTTGTAGAGATGGGGGAGGGGTCTTGTGTTGCC
AGGCTGGTCTTGAACCTCTGGTCTCAAGTGATCTTCTTGGCTTGGCTCCCAAAATGCTATGATTATGT
GCGTGAGCCACTGCTGCAATTGCGTTTTTTTTTCTTTCTCGAGACGGAGTCTCACTCCGTCACCCAGGC
TGAAAGTGCACTGGCGTGATCTTGGTTCACTGCAACGGCTCCTGGTTCGAGCGATCCTCACACCTTAGC
CTCCCTAGTAGCTGGAACTGCAGGCCCTGGCTAAGTTTTGTATTTTTTAGTAGAGACAGGGTTTCACTATG
TTTGCCAGCCTGGTCTTGAACTCCTGACCTCAGGTGATCAGCCTGCCCTCAGCCTCCCAAAAGTGTGGGA
TTTATAGGTGTAGCCACTGTGCCAGCCTACATTGATATTTTTTAAAAAGCCACTATTAAAAAAGGAGTA
ATCTGAGTAGTAAGAAGGAGTTCTTTAAAAACTGGCCGGGCATGGTGGCTCAGCCTGTAAATCCCAACA
CTTTGGGAGGCCGAGGCAGGCAGATCACCTGAGGTTGGTAGTTTAAAGAGCAGCCTGACCAACATAGAGA

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FIG. 16B(32)

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F'

F'

AACCCCATCTCTACTAAAAATACAAAATTAGCCAGGTGTGGTGCCACATGCCTGTAATCCCAGCTACTC
TGGGGCTGAGGCAGGAGATCGTTTGAACCTGGAAGGCAGAGGTTGCGGTGAACCGAGATCGTGCCAT
TGCACACCAGCTTGGGCAACAAGAGCAAACTCCGTCTCAAAACAACAACAACAACAACAACAACA
CAAAAACACCAACATGATTAGGAGGGAATACTAGATAGAAAGGCTTAAACAGGGCCGGCACGGT
GGCTCATGCCTGTAAAGCCCAACACTTTGGGAGGCCAGGTTGGGAGGACTGCTTGAGGCCAGGAGTTGA
GACCAGCCTGGGCAACTTAGCGAGACTCTGGTAGTCTGTCTTACCAACAACAACAACAACAACAACA
TAGCTGGGCATGGTGCCATATGCCCTATAGTCCCAGCTACCCGGGAGGCTGAGGCTGGAGGATCGCTTGA
GTCCCAGAGGTCAAGGCTGCACTGAGCTGTGATCAGGCCACTGCACCTCCAGCCTGGCGACAGAGCATG
AGTCTGCCCCAGCCTGCCTCCAAAAAGAAAGGCTAAATAGGAGAACTGATATAACTGAAACCAAAA
TTAGTTGTGTGAAGAGCAACTGTCTTGAAGCTCCAGAACACAGAGCAATAAGAGATGAAAAATATG
ACAGCATAGAAAAGAAAGGAAGTGGATAGGTTCCAGGAGATCCAAATACCTGTGCAACAGGAGATCCAAA
GAAAGAACCCAGTAAGAGGAGAGAGTAATAACAAGAAAGTTCTGAGTTATCAGGCCCAAAAGAAATAA
TCTAGTTTGTGGAGTAATATTGACAAAAAATCTTTACACCTAGATGTATTCTGAAAAAATCTTTAAAT
TCTAATTGAAATCAACCAACGAAACCAAGCCAGCCTTAGAAAAACCAATTTCCAGGGCATGGGTTTTAG
GGTCTGACAGACCTGAAAGTTCAAATTCCTACTATCCTAACTTACTAGTAGTGTGATAATCTCTTAGAAC
AATGTATGAAATGGAAGCATAATAGCACCTCCACCTTTTAGAGTTAATGGGAGATCTAAAAAGAGGTAA
CATTTGCAAAAGTGTGACATGAAGGGAAGAGATTGGCTTTGGCATCCACAAGTTCAACACACTAGCAGA
GAACCTCAGTCCAGCTTCCTACGCTCAGGCAGTTCTTTGCCTAGAAGAGGGTCCGCAACTATAGCCC
AAATTTAGCCCCACTGCCCTGTTTGTAAATAAAATGCTATCAGAACATGGCCATGTTCAATTCATTACA
TACCATCTATGGCTGCTTTTACATTACAAAGGCAGAGCTGAGTAGATGAGACAGAGACAGTATGGTTAC
AAACCGAAACTGTTTCAACCCCAACTTCATTCCAGCAAAGTTTTACTTTCTAGATTCAGGCCAGGGAGC
AAGCATGAAATGAAAACCACTAAATGGTGTCCCGGACACAGATACCTACTTCTATAACTTCTTT
CCTTGAAAACAAAGGGCCATATTAAATTGAAGGGCTCACCTCTAAACAGGTGAGTGACTTAAGGACTTCA
GACACACACTGGTCAACTACAAACTAGTCAGTAAAGGAATAGCCATAGTCTATAGCCCCAGTTCCTAT
GGCCCAGGGGGATCCACTAGTTCTAGAGCGGGCCCAACCGCGGTGGACTCCAG

G'

G'

FIG. 16B(33)

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Contig 15 (529 bp)

GCTGAGGTGCATCGCGGTGGCGGACGCTCTAGAACTAGTGGATCCCCTGCTGCTAA
 TTGATGGTAGACCCAATCAGATCCCCGAGAAAGCCGAAATACGGAAACCATATCAGCATACGCATGGCAT
 ACATAGAAACCCCATACATGGATTGCTTACTCAGCCAGATATAGAAATCTATCTTACGATAGAGATATA
 TATATATAGACACACTGCATATACAGATGTAGATGGAGGCTCACTCTGCCACCCGTGCTGGATCTACA
 GTGGCACAAAGCTCAGTCCACAGTCACGTCGATCTGCCGGGCGTGACCGACTGAGATGCAGCGGCTCGG
 GCGGTAGCTGTGAGTACAACGACCAAGTCATCGCGACTGGCTGCAAGTGGTATAGCGGAGGGGACAGGGT
 TACAGCATGACGGCTAGGCAGGCCGCAAACTGAGGACCACAAGAGTGCCACGCTGCCCCGAACGCATGCA
 GTGGCGAGATTACATGGGGCAGCCACTAGAGCCCGCGTATCAGAAA

Contig 33 (635 bp)

TACACGCGGTAGCGCCGCTCTAGAACTAGTGGATCGGGTAATCCAGCACCTTTGGGAGGCCAAGGAGGG
CAGATCACCTGAAGTCAGGAGTTTGAGACCAGCCTGGCCAAACATGGTGAAACTCCATCTCTACTAAAAAT
TACAAAAATTAGCCGGCGTGTGGCGCATGCCTGTAATCCCAGCTACTCGAGAGGCTGCGGCATGACA
GTCACTCAAGCCCGGAGTAGAGGTTGCAGTGAGCTGAGATTGTGCCACTGCACCTCCAGCCTGGGTGG
CAGAGTGAGACCCCTGTCTAAAAAATAAAAAAAGGCCCATTAGGGGACCCAAAAAGGTTTCCCCAGC
TTTTTGTGGATTTCGCCAAATTTGGGGCCAAATTTTGAGGGTGTCCCTTAAAAAATTAAAAATTTGGGG
TTTTTTTCCAGGCGCCATTAGAAATGGGTCCGAAAATTTTGGCCAAAAAATAATTGGTTTAACCCGC
GGACCACAAAATCCTAAGGTTAACTTTTCTAAACCTTTTAGAATTTAAAGTTTCGGGGTTTCTCAGG
AGGGGGTAACCCCTTCACCCCAATATAACTCGGAAACCCCCCTTTTTAGGAAAAAGGGGAATTAGTGGTG
CTTTCGGGGCCAAA

Contig 39 (938 bp)

[illegible]

FIG. 16B(34)